

ART, KNOWLEDGE, AND PAPAL POLITICS IN MEDIEVAL ROME

Interpreting The Aula Gotica Fresco Cycle
at The Santi Quattro Coronati

MARIUS B. HAUKNES



ART, KNOWLEDGE, AND PAPAL POLITICS IN MEDIEVAL ROME

Discovered in 1995, the remarkable thirteenth-century frescoes in the great hall, or *Aula Gotica*, of Rome's Santi Quattro Coronati complex are among the most important vestiges of medieval Italian painting. In this volume, Marius Hauknes offers a thorough investigation of the fresco cycle, which includes allegorical representations of the liberal arts, the virtues and vices, the seasons, the signs of the zodiac, and the months of the year. Hauknes relates these subjects to the papacy's growing interest in fields of worldly knowledge, such as music, time, astrology, and medicine. He argues that the Santi Quattro Coronati frescoes function as a large-scale, interactive encyclopedia that not only represented secular knowledge but also produced philosophical speculation, stimulating beholders to draw connections between pictorial motifs across architectural space. Integrating medieval intellectual history with close attention to multisensory and architectural conditions of fresco, Hauknes's study offers new insights into religion, art, science, and spectatorship in medieval Italy.

Marius B. Hauknes is Assistant Professor of Medieval Art at the University of Notre Dame. He has held the Agnes Gund and Daniel Shapiro Membership at the Institute for Advanced Study, Princeton, and an Ailsa Mellon Bruce Senior Fellowship at the Center for Advanced Study in the Visual Arts at the National Gallery of Art, Washington, DC.

ART, KNOWLEDGE, AND PAPAL POLITICS IN MEDIEVAL ROME

INTERPRETING THE AULA GOTICA
FRESCO CYCLE AT THE SANTI
QUATTRO CORONATI

MARIUS B. HAUKNES

University of Notre Dame, Indiana





Shaftesbury Road, Cambridge CB2 8EA, United Kingdom

One Liberty Plaza, 20th Floor, New York, NY 10006, USA

477 Williamstown Road, Port Melbourne, VIC 3207, Australia

314–321, 3rd Floor, Plot 3, Splendor Forum, Jasola District Centre, New Delhi – 110025, India

103 Penang Road, #05-06/07, Visioncrest Commercial, Singapore 238467

Cambridge University Press is part of Cambridge University Press & Assessment,
a department of the University of Cambridge.

We share the University's mission to contribute to society through the pursuit
of education, learning and research at the highest international levels of excellence.

www.cambridge.org

Information on this title: www.cambridge.org/9781009535762

DOI: [10.1017/9781009535779](https://doi.org/10.1017/9781009535779)

© Marius B. Hauknes, 2025

This publication is in copyright. Subject to statutory exception and to the provisions
of relevant collective licensing agreements, no reproduction of any part may take
place without the written permission of Cambridge University Press & Assessment.

When citing this work, please include a reference to the DOI [10.1017/9781009535779](https://doi.org/10.1017/9781009535779)

First published 2025

Printed in the United Kingdom by CPI Group Ltd, Croydon CR0 4YY

A catalogue record for this publication is available from the British Library.

A Cataloging-in-Publication data record for this book is available from the Library of Congress

ISBN 978-1-009-53576-2 Hardback

Cambridge University Press & Assessment has no responsibility for the persistence
or accuracy of URLs for external or third-party internet websites referred to in this
publication and does not guarantee that any content on such websites is, or will
remain, accurate or appropriate.

I dedicate this book to my true companion in life, Frances Jacobus-Parker

CONTENTS

<i>Acknowledgments</i>	<i>page ix</i>
INTRODUCTION	I
Chapter Outline	8
1 THE SANTI QUATTRO CORONATI FRESCOES IN CONTEXT	13
The Anagni Crypt	18
Palace Painting in Thirteenth-Century Rome	24
Art, Knowledge, and Papal Politics	38
The Santi Quattro Coronati Murals and Visual Encyclopedism	48
The Fresco Medium and Embodied Spectatorship	53
2 ART, LEARNING, AND REFLECTIVE VIEWING: THE LIBERAL ARTS AT SANTI QUATTRO CORONATI	69
Description of the Liberal Arts Cycle	71
The Papal Court and Education	75
Artes Liberales	79
Unidentified Originators	87
Letters, Words, and the Gender of Knowledge	97
<i>Musica Practica</i> and <i>Musica Theorica</i> : A Case Study	104
3 EMBLEMS OF TIME AND POLITICAL POWER: THE LABORS OF THE MONTHS AT SANTI QUATTRO CORONATI	127
The Noble Gaze	133
Between Narrative and Personification	141
Echoes of Antiquity	153

Desacralized Antiquities	158
Interpretive Uncertainty as a Token of Historical Time	165
4 ALLEGORY, HISTORY, AND POLITICAL ESCHATOLOGY: THE VIRTUES AND VICES AT SANTI QUATTRO CORONATI	188
Legal Rhetoric and Thirteenth-Century Politics	205
Allegory and History	218
5 VISUAL AND MATERIAL ENTANGLEMENT IN THE ANAGNI CRYPT	243
Astrology, Medicine, and Time	245
Participatory Looking	252
The Material Microcosm	259
Astro-Medicine and the Temporality of Illness	267
Incessant Mortality	271
The Contingency of the Human Condition	276
6 CONCLUSION	291
<i>Appendix: Inscriptions Appearing in the Aula Gotica Frescoes</i>	305
<i>Bibliography</i>	311
<i>Index</i>	349

ACKNOWLEDGMENTS

This book began as a dissertation supervised by Nino Zchomelidse, whose encouragement and friendship over the past sixteen years have shaped every aspect of my scholarly thinking and writing. Transforming my dissertation into the present book would not have been possible without the generous interest, insightful comments, and unyielding support of Herbert Kessler. I owe Nino and Herb a debt of gratitude I can never hope to repay.

Financial support for the research, writing, and production of this book was provided by Princeton University's Department of Art and Archaeology, the Center for Advanced Study in the Visual Arts at the National Gallery of Art, the Bibliotheca Hertziana – Max Planck Institute for Art History, the Princeton Institute for International and Regional Studies, the Medieval Institute at the University of Notre Dame, the Institute for Advanced Study in Princeton, the Institute for Scholarship in the Liberal Arts at the University of Notre Dame, the Barr Ferree Fund of Princeton University's Department of Art and Archaeology, and the Department of Art, Art History, and Design at the University of Notre Dame.

Numerous friends and colleagues have contributed to this book by commenting on my research at different stages or by helping secure images and permissions. These include Kristin Blikrud Aavitsland, Suzanne Conklin Akbari, Martina Bagnoli, the late John Baldwin, Jill Bain, Charlie Barber, Lia Barelli, Susanna Berger, Dieter Blume, Yves-Alain Bois, Giulia Bordi, Theodore J. Cachey, Nicola Camerlenghi, C. Jean Campbell, Stephen Campbell, Paroma Chatterjee, Lucas Christensen, Donal Cooper, Philippe Cordez, Elizabeth Cropper, the late Danny Ćurčić, Andreina Draghi, Anne Dunlop, Julian Gardner, Heidi Gearhart, Ludovico Geymonat, Manuela De Giorgi, Christoph Glorius, Cynthia Hahn, Christopher P. Heuer, Hanna Jacobs, Frances Jacobus-Parker, Robin Jensen, Nathaniel B. Jones, Dale Kinney, Michael Koortbojian, Aden Kumler, Christopher Lakey, Peter Lukehart, Anna Majeski, Mitchell Merback, Heather Hyde Minor, Richard Neer, Christian Nikolaus Opitz, Monica Otter, Valentino Pace, Eric Palazzo, Alison Locke Perchuk, Susanne Pollack, Larry Principe, Robin Rhodes, Serena Romano, Ingrid Rowland, Conrad Rudolph, Michael Schreffler, Gabrielle Spiegel, Justin Steinberg, Per Sigurd Styve, Erik Thunø, William Tronzo, Laura Weigert, the late Robert Williams, and Gerhard Wolf.

INTRODUCTION

IN 1995, ON THE CELIAN HILL IN ROME, A TEAM OF CONSERVATORS LED by Dottoressa Andreina Draghi made a remarkable discovery in the fortified tower attached to the basilica of Santi Quattro Coronati.¹ Concealed behind layers of whitewash in a vaulted hall were the remains of an extensive thirteenth-century fresco cycle (Figure I.1). The tower and hall originally formed part of a palace complex built for Stefano Conti, a high-ranking cardinal of the papal Curia who lived there from the early 1240s until his death in 1254.² During this time, Cardinal Conti sponsored a vast program of murals that included the newfound hall frescoes, the well-known series of narrative paintings in the small chapel dedicated to Saint Sylvester, and a painted liturgical almanac in the chapel's antechamber (Figures I.2 and I.3).³ To realize this program of fresco decorations, Conti hired the same teams of painters who had completed the large cycle of murals in the crypt of Anagni Cathedral a few years earlier.

The Santi Quattro Coronati murals were made during Conti's tenure as cardinal vicar of Rome (1244–54), a role that placed him in charge of managing papal affairs during the pope's absence.⁴ The frescoes in the great hall were designed to celebrate Conti's new political power and affection for worldly knowledge. The murals also promoted the papacy's proclaimed dominion in temporal and religious matters vis-à-vis its imperial rivals. Distributed across six large lunettes and two ribbed vaults, the frescoes display allegorical representations of various bodies of knowledge, including the liberal



1.1. Frescoed interior of great hall in residential tower, ca. 1244–54, view from north to south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

arts, the virtues and vices, the seasons, the signs of the zodiac, and the months of the year with their associated agricultural work. This combination of learned iconographic motifs sets Conti's hall apart from most other medieval Roman art, aligning it instead with the sweeping displays of worldly knowledge that adorned the façades of French Gothic cathedrals and the municipal halls, public fountains, and bell towers created for fourteenth-century Italian city states. In Rome, most large-scale pictorial cycles from the medieval period are found in ecclesiastical settings and, accordingly, feature biblical and hagiographical images along with iconic representations of saints and liturgically themed apse mosaics.⁵ These works have been preserved largely because they adorn church spaces whose basic architectural layouts and primary function as places of worship have remained unchanged. Conti's frescoed hall, however, belongs to an almost entirely lost corpus of palace paintings that once thrived alongside Rome's better-known ecclesiastical fresco and mosaic decorations. The decorative programs created for public buildings and the palaces of cardinals and the secular nobility have mostly been lost to history.⁶ Unlike churches, such



1.2. Frescoed interior of Sylvester Chapel, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Stephen Bisgrove / Alamy Stock Photo.



1.3. Calendar Room, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.

spaces were continuously requisitioned by new patrons as the political landscape shifted and as new popes and baronial families rose to power. Additionally, whereas ecclesiastical frescoes and mosaics usually evoked timeless religious ideas, the wall paintings that were created for residences and secular settings often advanced specific political messages or glorified the power and sophistication of individual families. Palace murals were thus much more likely to be replaced, updated, or whitewashed in response to shifting political demands.

The disappearance of these non-ecclesiastical decorations has given rise to narratives about medieval Rome's artistic and architectural production that now appear inaccurate. In the traditional story of late medieval Italian art, innovation occurred primarily outside of Rome and above all in the flourishing urban communities at Padua, Siena, and Florence, where artists such as Giotto, Ambrogio Lorenzetti, and Andrea Pisano developed naturalistic forms and erudite iconographies in painting and sculpture. In contrast to these sites of innovation, medieval Rome was characterized as distinctly retrospective and thus impervious to new artistic trends. Art patronage in the city and its surrounding papal territories was largely the domain of ecclesiastical elites who purportedly rejected innovation in favor of building techniques and iconographic schemes that celebrated the gilded era of early Christianity. Instead of erecting lofty Gothic cathedrals and developing new forms of painting and sculpture – so the story often went – popes and cardinals wanted nothing more than to refurbish the early Christian basilicas and to outfit these venerated structures with updated versions of their original decorations.⁷ In other words, the city's distinct Late Antique heritage and the perceived conservatism of the papacy were seen as dual impediments to artistic innovation.

The murals at Santi Quattro Coronati directly counter such misconceptions, demonstrating that Roman painters and their curial sponsors played a pivotal role in the development of a stylistically sophisticated and overtly scholarly art form in medieval Italy. Indeed, the frescoes' distinct thematic focus on worldly knowledge establishes them as an avant-garde example of monumental encyclopedic art on the Italian peninsula. In the Italian context, artworks with a comparable thematic outlook include some of the most celebrated monuments of Gothic art, including the Fontana Maggiore in Perugia (ca. 1278), the Florentine campanile reliefs (ca. 1340–60), the Sala dei Nove frescoes in Siena (1337–40), the sculpted capitals of the Doge's Palace in Venice (1342–8), and the frescoes in the Dominican chapterhouse at Santa Maria Novella in Florence (ca. 1369). Like Conti's frescoes, these works celebrated scholarly learning as an aspect of the cultural identity and political power of their respective communities. The newfound murals at Santi Quattro Coronati indicate that the emergence of such innovative pictorial schemes in Italy can

be traced to thirteenth-century Rome and to the cultural conditions at the papal court in this period.

This process comes into even sharper focus when we consider Cardinal Conti's frescoes in their more immediate cultural historical context. As other art historians have noted, the most relevant comparandum for the Santi Quattro Coronati frescoes is the roughly contemporaneous mural cycle in the crypt of Anagni Cathedral (Figure I.4).⁸ Located about forty miles south of Rome, Anagni was the hometown of the powerful Conti clan and remained a favored destination for the papal Curia for much of the thirteenth century.⁹ The enigmatic mural ensemble in the Anagni crypt was painted by the same anonymous artists who decorated Conti's great hall.¹⁰ The Anagni murals were likely commissioned by a close relative of Stefano Conti, perhaps Pope



I.4. Frescoed interior of Anagni crypt, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Gregory IX (Ugolino dei Conti di Segni; 1227–41), who is known to have sponsored the crypt's sumptuous marble floor and liturgical furnishings.¹¹ Furthermore, like Conti's great hall, the Anagni crypt was a multifunctional space that served in part as a gathering room for members of the papal court. The erudite murals found in both spaces were clearly directed at the rigorously educated members of the pope's entourage. Yet, perhaps the most important common feature of the two murals was their aim to represent the world's knowledge within the framework of a single pictorial program. As assemblages of learning rendered in large-scale fresco, the two monuments functioned as visual-spatial encyclopedias that viewers could step into.

The Anagni frescoes relate to the newfound murals at Santi Quattro Coronati in a way that is interpretively synergistic. Thus, while this book is primarily a monograph on Cardinal Conti's great hall, one of its chapters is devoted to analyzing the Anagni frescoes in relation to the papacy's politically motivated cultivation of worldly knowledge. This juxtaposition aims to show that the discovery of the Santi Quattro Coronati frescoes opens up a new way of understanding the notoriously opaque iconographic program in Anagni. It also shows that the slightly earlier Anagni frescoes are the key to understanding the conceptual underpinning of Conti's murals at Santi Quattro Coronati. Painted about a decade or so before Conti's great hall, the Anagni murals explore the philosophical notion of the material world's fundamental interconnectedness as contained in the principle of microcosmic–macrocosmic symmetry. The Santi Quattro Coronati frescoes articulate this same philosophical idea on a more ambitious scale and with greater interpretive clarity.

The juxtaposition with the Anagni crypt also allows us to see the Santi Quattro Coronati frescoes as part of a larger development in papal court culture. The courts that assembled around thirteenth-century pontiffs differed from those of previous centuries in their appraisal of higher education and worldly forms of knowledge. During the central decades of the century, a new generation of university-educated popes, cardinals, and clerics fostered translations of scholarly texts and new learning in the fields of medicine, optics, astronomy, and alchemy.¹² This cultural flowering was in part motivated by a rivalry with the courts of secular rulers, particularly that of Emperor Frederick II in Southern Italy. The Anagni and Santi Quattro Coronati frescoes demonstrate that the papacy's fascination with worldly knowledge impacted its thinking about the monumental arts. The two murals displayed the papacy's embrace of worldly learning at a time of significant epistemic change in medieval intellectual history. Yet, according to the argument advanced in this book, the two monuments did not merely display knowledge; they also implicated viewers in a dynamic process of knowledge generation. The artists who painted the two monuments appear to have been particularly interested in the spatial characteristics engendered by the interplay between painting and

architecture. The fresco artists took advantage of this interplay to produce visual anthologies of knowledge wherein narrative and allegorical images were stylistically interwoven to create visual-spatial immersion. The courtly viewers for whom the frescoes were intended were encouraged to explore the figured spaces with their eyes, intellect, and bodily movements, and to utilize the architecturally embedded paintings as vehicles for thinking. These interactions between wall paintings and cognitively engaged beholders could generate levels of significance that transcended the literal meaning of individual pictorial motifs.

This book examines the frescoes at Santi Quattro Coronati and Anagni against two overlapping historical backdrops. On the one hand, the innovative murals can be seen in the context of the papacy's political struggle with Emperor Frederick II during the second quarter of the thirteenth century. During this period, the papacy's jurisdiction in temporal affairs was forcefully challenged by the imperial court. In response to such political pressure, the two mural cycles make a case for the harmonious coexistence of worldly and sacred knowledge and – more generally – for the non-existence of any distinction between the secular and the sacred. The chapters that follow also examine the fresco cycles in relation to the period's epistemic developments. The Anagni and Santi Quattro Coronati frescoes form part of a broad cultural impulse toward systematization of knowledge that manifested itself in a variety of visual and textual media during the twelfth through fourteenth centuries.¹³ Like medieval encyclopedias in written form, the two murals conceptualized each body of knowledge as a systematic whole, even if the images they contained could be combined and spliced together in divergent ways. The distinctive bidirectional design of the two murals, wherein the production of meaning unfolded as a collaborative process between paintings and beholders, can be understood as a form of aesthetic commentary on the collaborative and aggregative nature of medieval encyclopedism. These innovative uses of large-scale fresco should be seen in relation to the increased openness toward worldly knowledge among members of the thirteenth-century papal court. As fresco cycles imbued with the potential to generate new knowledge, the two Conti monuments were integral to the unprecedented intellectual expansion in thirteenth-century court culture.

In advancing these arguments, I draw especially on the foundational work of Andreina Draghi, whose rigorously researched publications form the basis of any scholarly study of the Santi Quattro Coronati frescoes.¹⁴ I also build on significant studies by Lia Barelli, Christian Nikolaus Opitz, Serena Romano, Oliver Götze, and Dieter Blume, who have outlined some of the ways in which Cardinal Conti's murals can be placed in dialogue with the period's political, scientific, and literary developments.¹⁵ Similarly, my analysis of the Anagni crypt in [Chapter 5](#) is indebted to numerous earlier studies, particularly

those of Bjarne Andberg, Martina Bagnoli, Lorenzo Cappelletti, Kathrin Müller, and Michael Q. Smith, who have already uncovered many of the philosophical and ideological underpinnings of the crypt's unusual pictorial program.¹⁶

CHAPTER OUTLINE

Chapter 1 provides an overview of the book's contextual and methodological frameworks. It begins with a description of the historical and thematic resonances between Cardinal Conti's frescoes and the painted crypt in Anagni Cathedral. This discussion is followed by an examination of the fragmented remains of medieval Roman palace paintings in locations such as San Clemente, San Saba, Santa Maria de Aventino, and the abbey of Tre Fontane. The chapter also includes a concise discussion of the period's political and cultural developments, which shows that Conti's murals emerged from – and responded to – a complex historical backdrop in which political turbulence was uniquely combined with significant cultural intellectual expansion. Finally, a method section describes the book's approach to the study of medieval mural painting, which integrates iconographic research with a close consideration of the artistic medium's spatial characteristics.

In **Chapter 2**, I examine the representations of the liberal arts in the south bay lunettes of Conti's great hall in light of the changing status of education and the broad interest in temporal knowledge at the thirteenth-century Curia. The chapter surveys the status of the *artes liberales* in medieval cultural production to focus attention on the pictorial innovations evident in the Quattro Coronati frescoes. Across the scenes of the arts cycle, particular emphasis is placed on the transmission of knowledge through representations of interpersonal dialogue and through the development of purposeful ambiguity as a platform for reflective viewing. These innovative aspects of the arts imagery, the chapter argues, were designed to spur intellectual reflection and lively debate among the frescoes' courtly beholders. Spectators could engage with the frescoes in such open-ended and reflective ways because they themselves were rigorously trained in the liberal arts.

The chapter also examines the visually striking representation of music in relation to the seemingly unique architectural design of Conti's hall, whose acoustic tubes transmitted music and other sonic events from the Sylvester Chapel on the ground floor. Along with the frescoes, these medieval "loudspeakers" created a multisensory environment for the contemplation of music's theoretical and practical dimensions. With the harmonious voices of choristers filling the hall, visual reflection on the status of music as an ancient form of knowledge with a complex medieval history was combined with the real-time experience of music as an aesthetic phenomenon.

Chapter 3 explores how Conti's murals engaged viewers in speculation about the multifaceted nature of time. The Quattro Coronati frescoes included two calendars: the labors of the months in the south bay of the great hall and the painted liturgical almanac in the Sylvester Chapel's antechamber. These frescoed images of temporal duration, the chapter suggests, invited contemplation on the ways in which time might be harnessed in the production of a politically charged worldview and on time's potential for empirical observation and visual representation in the static medium of wall painting. Citations of antique motifs and visual storytelling devices in the cycle of labors enrich and complicate the mural's principal conception of time as unidirectional and regular. The chapter places these painterly manipulations of time in conversation with the overtly anachronistic lunettes in the north bay, which offered a sophisticated commentary on the relation of the pagan past to the Christian present in ways that aligned with the broader messaging of Conti's fresco program.

Turning to the marvelously complex cycle of virtues and vices in the north bay of Conti's painted hall, Chapter 4 elucidates the cycle's use of two symbolically charged pictorial devices: the motif of trampling, to signal moral conquest or political triumph; and that of "sitting on shoulders," to express typological relationships between historically disjointed figures. The chapter also analyzes the frescoes' distinct mingling of allegorical and historical figures as a departure from traditional virtue cycles based on Prudentius's fifth-century poem *Psychomachia*. I argue that the incorporation of historical heroes and villains, along with the inscriptions on the many sheets of parchment held by virtues and vices, turned the cycle into an eschatological history of the struggles between the church and its perceived enemies. Conti's murals connected this epic to the ongoing conflict between the pope and Emperor Frederick II, who was widely perceived by the papacy and its adherents as the Antichrist.

In Chapter 5, I expand my examination to the frescoes in the Anagni crypt, demonstrating that this monument's significance resides in the particular mode of spectatorship it engenders, wherein the display of knowledge invites open-ended exploration of the philosophical possibilities of the medium of wall painting. The chapter focuses especially on the visual representations of cosmological theory near the crypt's entrance, which foreground the conception of a connected world where all things are deliberately bound. The idea of material entanglement, which lay at the heart of medieval cosmological and astro-medical thinking, resonated thematically with the visual and spatial entanglement experienced by viewers as they explored the crypt murals with their intellects and bodily movements. The monument's thematic focus and spectatorial demands thus worked together to stimulate viewers' reflection on humankind's material and temporal entanglement vis-à-vis the compensatory potential of astrology and medicine.

Finally, the book's [Conclusion](#) summarizes the key commonalities between the Santi Quattro Coronati and Anagni murals, arguing that each monument functioned not only as a monumental image of the world's knowledge but also as an interactive tool for philosophical thinking. The chapter also relates the downstream effects of these innovative fresco cycles, suggesting that they might be seen as precursors to a series of large-scale pictorial programs that appeared in public squares, communal palaces, monastic halls, ecclesiastical chapels, and episcopal palaces from the 1270s onward.

NOTES

- 1 Andreina Draghi, "Il ciclo di affreschi nel salone gotico del complesso dei SS. Quattro Coronati a Roma," *Studi Romani* 47 (1999): 442–4; Andreina Draghi, "Il ciclo di affreschi rinvenuto nel Convento dei SS. Quattro Coronati a Roma: un capitolo inedito della pittura romana del Duecento," *Rivista dell'Istituto Nazionale d'Archeologia e Storia dell'Arte* 3:22 (1999 [2001]): 115–66; Andreina Draghi, "Il ciclo dei mesi nell'aula gotica dei Santi Quattro Coronati a Roma: considerazioni sull'iconografia del mese di Marzo e sulla Cappella di San Silvestro," *Bollettino d'Arte* 128 (2004): 19–38; Andreina Draghi, *Gli affreschi dell'Aula gotica: una storia ritrovata* (Milan: Skira, 2006); Andreina Draghi, "L'Aula 'gotica'," in *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*, ed. Serena Romano (Milan: Jaca Book, 2012), 137–76.
- 2 Werner Maleczek, "Stefano Conti," in *Dizionario biografico degli italiani* (Rome: Istituto della Enciclopedia Italiana, 1983), 28:475–8.
- 3 Andreina Draghi, "La decorazione della cappella di San Silvestro," in *La pittura medievale a Roma. Volume 5*, 191–208; Andreina Draghi, "Il Calendario nella sala antistante la cappella di San Silvestro," in *La pittura medievale a Roma. Volume 5*, 180–90.
- 4 In 1244, the newly elected Innocent IV (1243–54) fled the Italian peninsula for fear of imprisonment by his political rival Emperor Frederick II. The pope sought refuge in Lyons, where he remained until after Frederick's death in 1250. See J. A. Watt, "The Papacy," in *New Cambridge Medieval History*, ed. David Abulafia (Cambridge: Cambridge University Press, 2008), 5:107–63, esp. 132–43.
- 5 Fundamental studies on narrative painting in Roman basilicas are Herbert L. Kessler, *Old St. Peter's and Church Decoration in Medieval Italy* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 2002); Herbert L. Kessler, "'Caput et speculum omnium ecclesiarum': Old St. Peter's and Church Decoration in Medieval Latium," in *Italian Church Decoration of the Middle Ages and Early Renaissance: Functions, Forms and Regional Traditions*, ed. William Tronzo (Bologna: Nuova Alfa Editoriale, 1989), 121–45; Herbert L. Kessler, "Storie sacre e spazi consacrati: la pittura narrativa nelle chiese medievali (sec. IV–XII)," in *L'arte medievale nel Contesto. Iconografia, funzioni, tecniche*, ed. P. Piva (Milan: Jaca Book, 2006), 275–302; Nino M. Zchomelidse, *Santa Maria immacolata in Ceri. La pittura Sacra al tempo della Riforma Gregoriana* (Rome: Archivio Guido Izzì, 1996), esp. 53–78; Marilyn Aronberg Lavin, *The Place of Narrative: Mural Decoration in Italian Churches, 431–1600* (Chicago: University of Chicago Press, 1994), esp. 1–42. For the striking consistency of Roman apse compositions, where a centrally placed figure of Christ is flanked by collocated apostolic and post-apostolic saints, see Erik Thunø, *The Apse Mosaic in Early Medieval Rome: Time, Network, and Repetition* (Cambridge and New York: Cambridge University Press, 2015), esp. 1–62, 197–208. Thunø argues that the repetition of this distinct compositional formula across centuries developed a meaningful and non-hierarchical relationship between Rome's early medieval basilicas, thereby establishing an expansive "community" that incorporated represented saints and beholding worshippers into a timeless and transpatial unity.

- 6 For the fragmented remains of medieval Roman palace paintings dating to the thirteenth and fourteenth centuries, see Romano, *La pittura medievale a Roma. Volume 5*; Serena Romano, ed., *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 6: Apogeo e fine del Medioevo (1288–1431)* (Milan: Jaca Book, 2017).
- 7 The retrospective character of medieval Roman art and architecture is a recurrent theme in Richard Krautheimer, *Rome: Profile of a City, 312–1308* (Princeton, NJ: Princeton University Press, 1980). Nuanced responses to Krautheimer's thesis include Caroline J. Goodson, *The Rome of Pope Paschal I: Papal Power, Urban Renovation, Church Rebuilding and Relic Translation, 817–824* (Cambridge: Cambridge University Press, 2010), esp. 81–159; Sible de Blaauw, "Reception and Renovation of Early Christian Churches in Rome, c. 1050–1300," in *Rome Across Time and Space: Cultural Transmission and the Exchange of Ideas c. 500–1400*, eds. Claudia Bolgia, Rosamond McKitterick, and John Osborne (Cambridge: Cambridge University Press, 2011), 151–66; Hendrik Dey, *The Making of Medieval Rome: A New Profile of the City, 400–1420* (Cambridge: Cambridge University Press, 2021).
- 8 Among the most significant studies of the Anagni frescoes are Pietro Toesca, "Gli affreschi della cattedrale di Anagni," *Le Gallerie Nazionali Italiane* 5 (1902): 116–87; Michael Q. Smith, "Anagni: An Example of Medieval Typological Decoration," *Papers of the British School at Rome* 33 (1965): 1–47; Bjarne Andberg, "Le paysage marin dans la crypte de la cathédrale d'Anagni," *Acta Ad Archaeologiam et Artium Historiam Pertinentia* 2 (1965): 195–201; Bjarne Andberg, "Osservazioni sulle modifiche delle volte nella cripta di Anagni," *Acta Ad Archaeologiam et Artium Historiam Pertinentia* 6 (1975): 117–26; Frederik W. N. Hugenholtz, "The Anagni Frescoes: A Manifesto," *Mededeelingen van het Nederlands Instituut te Rome* 41 (1979): 139–72; Miklos Boskovits, "Gli affreschi del Duomo di Anagni: Un capitolo di pittura romana," *Paragone* 30:357 (1979): 3–41; Martina Bagnoli, "The Medieval Frescoes in the Crypt of the Duomo of Anagni" (PhD diss., Johns Hopkins University, 1998); Gioacchino Giammaria, ed., *Un universo di simboli: Gli affreschi della cripta nella cattedrale di Anagni* (Rome: Viella, 2001); Lorenzo Cappelletti, *Gli affreschi della cripta anagnina, iconologia* (Rome: Editrice Pontificia Università Gregoriana, 2002); Kathrin Müller, "Profane Knowledge, Sacred Insights: The Cosmological Diagrams in the Crypt of Anagni Cathedral," *Codex Aquilarensis* 33 (2017): 55–72.
- 9 See Raffaele Ambrosi de Magistris, *Storia di Anagni* (Rome: V. Apolloni, 1889); Pietro Zappasodi, *Anagni attraverso i secoli*, 2 vols. (Veroli: Atesa, 1908); Daniela Ricci and Antonia Lauria, "Anagni papale," in *Bonifacio VIII e il suo tempo: Anno 1300 il primo giubileo*, ed. Marina Righetti Tosti-Croce (Milan: Electa, 2000), 239–44.
- 10 The paintings in the great hall have been attributed to a workshop commonly referred to as the "Third Master" of the Anagni crypt; the frescoes of the Sylvester Chapel are usually ascribed to the "Second Master" at Anagni. For these attributions, see Draghi, "Il ciclo di affreschi rinvenuto," 150–8; Alessandro Tomei, "Dagli Svevi agli Angioini: declinazioni locali tra modelli romani e arte d'Olttralpe," in *La pittura medievale nell'Abruzzo aquilano*, eds. Stefania Paone and Alessandro Tomei (Cinisello Balsamo: Silvana, 2010), 35–69, esp. 44–5.
- 11 The date of the Anagni frescoes has been subject of some controversy. The most important recorded termini are the completion of the marble floor and the consecration of the main altar in 1231, and the final consecration of the two lateral altars by Alexander IV in 1255. Scholarship is largely in agreement that the paintings were executed in the period between these two events. In recent decades art historical discourse has settled on a date range coinciding with Gregory IX's reign. For a thorough discussion of dating and the question of patronage, see Alessandro Tomei, "Gli affreschi: una lettura," in *Un universo di simboli. Gli affreschi della cripta della cattedrale di Anagni*, ed. Gioacchino Giammaria (Rome: Viella, 2001), 39–48.
- 12 Agostino Paravicini Bagliani, *Medicina e scienze della natura alla corte dei papi nel duecento* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1991); Steven J. Williams, *The Secret of Secrets: The Scholarly Career of a Pseudo-Aristotelian Text in the Latin Middle Ages*

- (Ann Arbor: University of Michigan Press, 2003), esp. 109–41; David C. Lindberg, “Lines of Influence in Thirteenth-Century Optics: Bacon, Witelo and Pecham,” *Speculum* 46 (1971): 66–83; Maria Gloria Vinci, “Il Cardinale cistercense Giovanni da Toledo e gli interessi per la medicina e l'alchimia alla corte dei papi del XIII secolo,” *Rivista Cistercense* 7 (2000): 5–32.
- 13 On medieval encyclopedism, see Peter Binkley, ed., *Pre-Modern Encyclopaedic Texts: Proceedings of the Second COMERS Congress*, Groningen, 1–4 July 1996 (Leiden: Brill, 1997); Michelangelo Picone, ed., *L'enciclopedia medievale* (Ravenna: Longo, 1994); Bernard Ribémont, “Encyclopedias,” in *Medieval Science, Technology, and Medicine: An Encyclopedia*, eds. Thomas F. Glick et al. (New York: Routledge, 2005), 159–61; Mary Franklin-Brown, *Reading the World: Encyclopedic Writing in the Scholastic Age* (Chicago: University of Chicago Press, 2012).
 - 14 Draghi, “Il ciclo di affreschi nel salone gotico”; Draghi, “Il ciclo di affreschi rinvenuto”; Draghi, *Gli affreschi*; Draghi, “L'Aula ‘gotica’.”
 - 15 Lia Barelli, *The Monumental Complex of Santi Quattro Coronati in Rome*, trans. Christopher McDowall (Rome: Viella, 2009); Serena Romano, “Geografia del potere nella Roma del Duecento,” in *Medioevo: la chiesa e il palazzo. Atti del Convegno internazionale di studi, Parma, 20–24 settembre 2005*, ed. Arturo Carlo Quintavalle (Milan: Electa, 2007), 624–35; Serena Romano, “I cantieri di Roma,” in *La pittura medievale a Roma. Volume 5*, 18–22; Christian Nikolaus Opitz, “Weltbild–Bildräume–Gedächtnisbilder: enzyklopädische Freskenzyklen in Repräsentationsräumen des 13.–15. Jahrhunderts,” in *Weltbilder im Mittelalter: Perceptions of the World in the Middle Ages*, eds. Philipp Billion et al. (Bonn: Bernstein, 2009), 29–60; Oliver Götze, *Der öffentliche Kosmos: Kunst und wissenschaftliches Ambiente in italienischen Städten des Mittelalters und der Renaissance* (Munich: Utz, 2010), 13–46; Dieter Blume, “Die Aula Gotica von Santi Quattro Coronati, Kosmos, Antike und Tugenden im Selbstverständnis der Kurie,” in *Die Päpste und Rom zwischen Spätantike und Mittelalter: Formen Papstlicher Machtentfaltung*, eds. Tanja Michalsky, Norbert Zimmermann, Stefan Weinfurter, and Alfred Wiczorek (Regensburg: Schnell und Steiner, 2017), 213–33.
 - 16 Smith, “Anagni”; Andberg, “Le paysage marin”; Bagnoli, “The Medieval Frescoes in the Crypt of the Duomo of Anagni”; Cappelletti, *Gli affreschi*; Müller, “Profane Knowledge, Sacred Insights.”

ONE

THE SANTI QUATTRO CORONATI FRESCOES IN CONTEXT

AT THEIR COMPLETION, AT SOME TIME BETWEEN 1244 AND 1254, CARDINAL Conti's fresco decorations extended across every available wall in Santi Quattro Coronati's great hall, from the floor level to the tops of the ribbed vaults, and even across the jambs of the doors and windows (Figure 1.1).¹ At present, less than half of the original wall paintings remain intact. Preserved are portions of the south bay vault and the upper halves of all six walls; however, the paintings that covered the north bay vault and the lower halves of the walls are lost. In light of such lacunae, it is remarkable that the paintings which do remain offer a relatively clear sense of the mural program's thematic focus as a whole. A quick scan of the preserved frescoes reveals a unified system of knowledge organized into distinct subunits. In the south bay, the months of the year and the personified seasons represent knowledge of time, the stars and planets painted on the vault represent cosmological knowledge, and images of the liberal arts in the lunettes represent knowledge of the ancients as preserved and disseminated through institutionalized education (Figures 1.2–1.4). In the north bay, the cycle of virtues and vices represents moral, historical, and theological knowledge, while the images of Roman antiquities represent the city's material heritage and the idea of Rome as a site of Christian triumph over paganism (Figures 1.5–1.7). This program of images constitutes a “pictorial encyclopedia” in the sense that its combined treatment of temporal, cosmological, historical, moral, and educational themes approximates the diversity of subject matter and organizational logic found in textual encyclopedias of the



1.1. Frescoed interior of great hall in residential tower, ca. 1244–54, view from south to north bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.2. Frescoes on west wall of south bay showing labors of the months (January–April) in lower register, liberal arts (Geometry and Grammar) in lunette, and personifications of the seasons (Spring and Winter) in spandrels, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.3. Frescoes on south wall of south bay showing labors of the months (May–August) in lower register, liberal arts (Arithmetic and Music) in lunette, and personifications of the seasons (Summer and Spring) in spandrels, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.4. Frescoes on east wall of south bay showing calendar cycle (September–December) in lower register, liberal arts (Astronomy) in lunette, and personifications of the seasons (Summer and Autumn) in spandrels, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.5. Frescoes on west wall of north bay showing virtues and vices in lower register and Mithras slaying the bull in lunette, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.6. Frescoes on north wall of north bay showing virtues and vices in lower register and personified rivers in lunette, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.7. Frescoes on east wall of north bay showing virtues and vices in lower register and personified sun and moon in lunette, ca. 1244–54, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

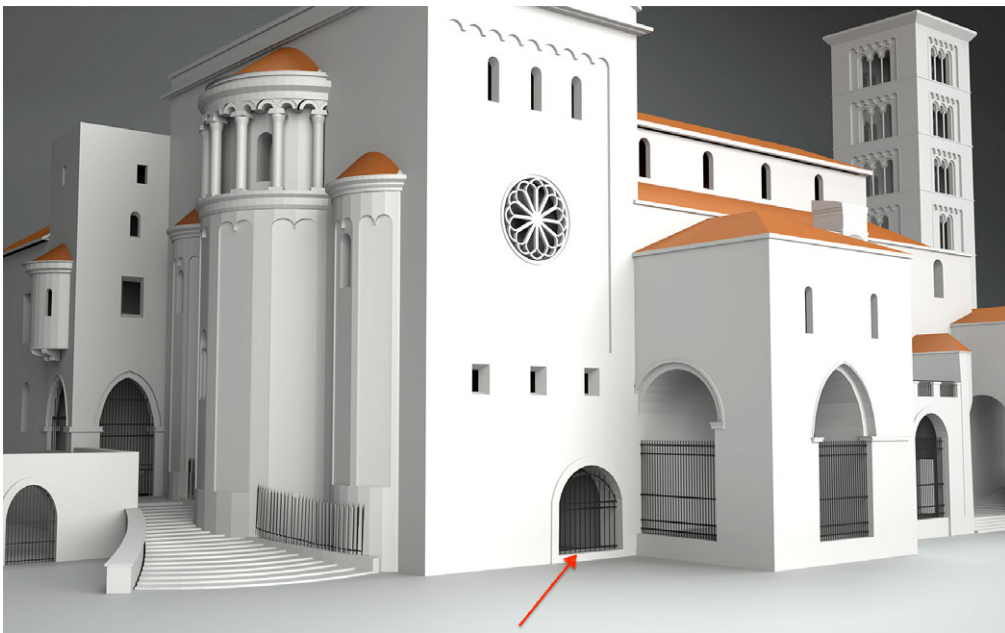
medieval period. While comparable iconographic programs were executed in sculpture for the façades of French cathedrals in the twelfth century, Conti's great hall is one of the earliest fresco programs to feature encyclopedic knowledge.

The broader cultural phenomenon of medieval encyclopedism is one of several pertinent backdrops against which the Santi Quattro Coronati frescoes should be analyzed. This chapter aims to outline this and other contextual and methodological parameters that will aid our understanding of the monument. In what follows, we will see that the encyclopedism of Conti's fresco cycle resided not only in its choice of iconographic motifs but also in its treatment of architectural space. The effect of visual and spatial enclosure resulting from the coming together of architectural space and painting in the fresco medium strongly enhanced the monument's capacity to convey the notion of encyclopedic knowledge to its spectators. We will also see how the retelling of sacred history through the great hall's cycle of the virtues invites us to examine the frescoes in light of the thirteenth century's political turbulence, and how the prominent depiction of King Solomon at the center of the north wall encourages reflection on the relationship between Conti's frescoes and the political motivations underlying the cultivation of worldly knowledge by the papacy.

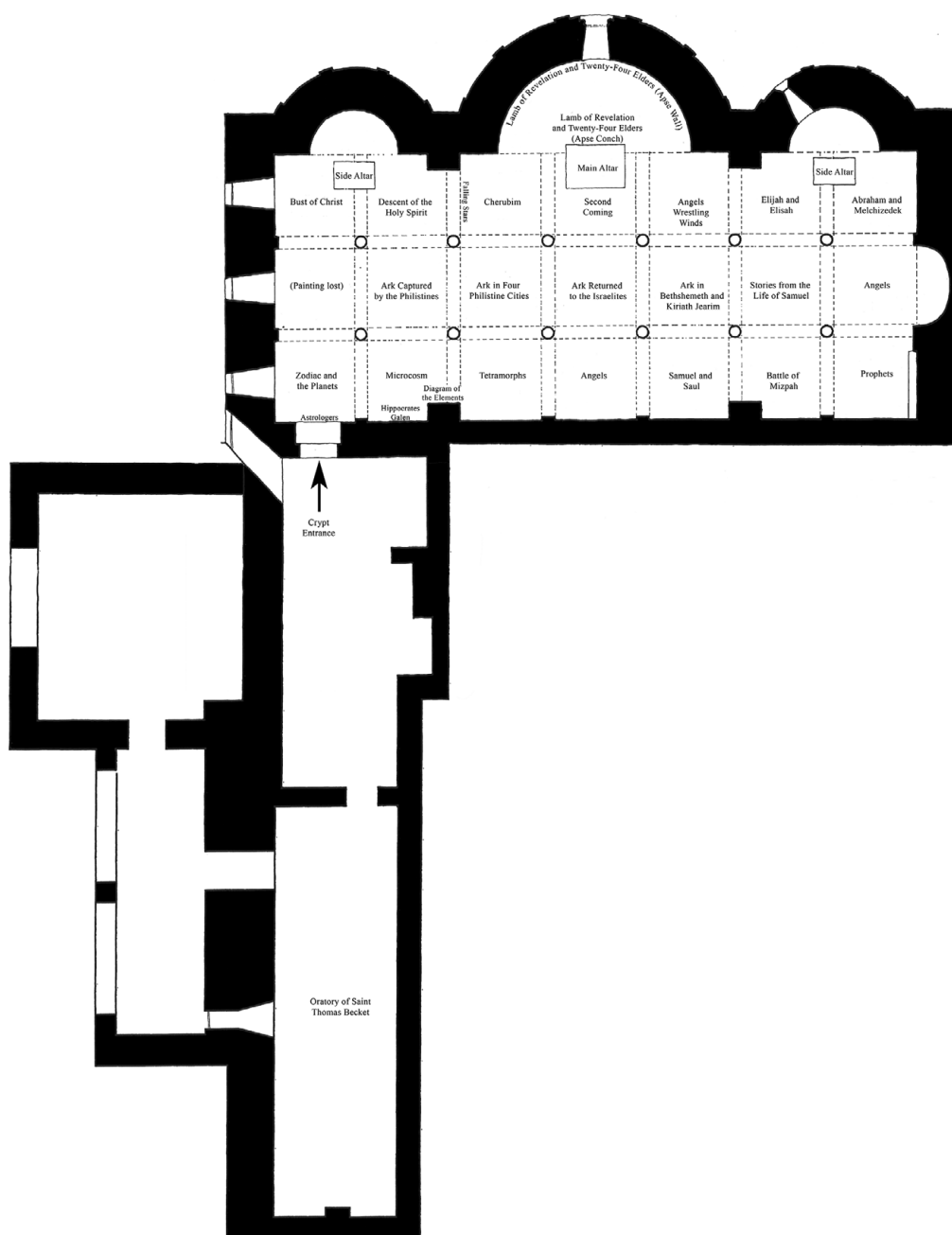
Before addressing these historical contexts, however, we must examine the art historical relationships between the Quattro Coronati frescoes and other thematically similar monuments produced in Rome and the papal state during the period. The most relevant of these are the closely related, yet notoriously obscure, frescoes in the crypt of Anagni Cathedral; it is only fitting that this is where we begin.

THE ANAGNI CRYPT

In the history of medieval Italian art, the Anagni crypt has been treated as something of an outlier. Its anomalous status can be ascribed to several factors. Few hall crypts in medieval Italy were richly decorated with frescoes or furnished with costly floors like the marble pavement installed at Anagni by the Cosmati family of papal builders around 1231 (see Figure 1.3).² An uncommon architectural configuration further distinguishes the crypt; in the thirteenth century, it could be entered only from the town square, through a doorway on the west side of the transept (Figures 1.8 and 1.9).³ Accordingly, the crypt was not really a “crypt” in the conventional sense.⁴ Rather, it functioned both as a richly decorated burial chamber for the remains of local saints and as a type of palatine chapel oriented toward the papal residence across the piazza.⁵ Yet, it is above all the perplexing combination of images



1.8. Three-dimensional rendering of Anagni Cathedral. Arrow shows location of original entrance to the crypt and the Oratory of Saint Thomas Becket. Image: Courtesy of Francesco Manzo, www.graframan.com



1.9. Plan of Anagni crypt. Image: Courtesy of Devlin Hose.

contained within its iconographic program that has baffled art historians from the time of its first investigation by Pietro Toesca in 1902.⁶ Anyone who has visited the Anagni crypt has likely experienced the distinct interpretive difficulty of its sweeping mural scheme. Many scholars have noted that, while the

fresco program conveys a sense of conceptual and formal unity, the true nature of this unity remains unclear.⁷ This interpretive difficulty arises in large part from the mural's thematic diversity, which combines biblical, hagiographical, apocalyptic, theological, medical, and cosmological images within a stylistically and spatially unified pictorial program.

Like Cardinal Conti's murals at Santi Quattro Coronati, the Anagni frescoes engaged with the highly versatile concept of the medieval encyclopedia. Yet, whereas the Santi Quattro Coronati frescoes featured classic encyclopedic motifs and were organized with scholastic clarity, the crypt frescoes adopted a more open-ended organization and a significantly more variegated iconographic repertoire. Indeed, the Anagni frescoes could most appropriately be compared to the particular type of encyclopedia known as the *florilegium*, which was an anthology of religious and scientific motifs collected as supports for contemplation in a manner comparable to picking flowers and herbs for medicinal purposes.⁸ *Florilegia* could be organized in any number of idiosyncratic ways and did not have to be read or studied in linear order.⁹ Analogously, the Anagni mural appears to have been devised as an open-ended compendium of knowledge in which different pictorial motifs could be spliced together in various ways to produce different interpretive outcomes. The collection of scholarly pictorial motifs near the crypt's entrance provides a conceptual basis for understanding the Anagni fresco scheme. The diagrams representing the microcosm, the interconnections between the elements, and the planets and constellations foreground an understanding of the world in which all material things are purposefully bound (Figure 1.10). The epigraph inscribed on the books near Hippocrates and Galen articulates this philosophical premise: "That which is in this world results from the concatenation of the elements. It is from these that all things created are formed."¹⁰ The view that humans and the material universe are inextricably linked was the founding principle of all medieval philosophical systems. The chapters that follow detail how Cardinal Conti's hall calls attention to this philosophical idea by unifying architectural space with paintings that linked divine creation with human ingenuity and perseverance. The Anagni crypt follows the same conceptual pathway but arrives at a more complex and thematically diverse presentation of the material world's fundamental interconnectedness.

In characteristic fashion, the crypt's fresco program juxtaposes erudite diagrams with hagiographical images that address the funerary dimension of the space (Figure 1.11). Narrative images and iconic portraits in the two lateral apses contextualize the relics of the local saints Secundina, Aurelia, Neomisia, and Sebastian, which are contained in the crypt's altars (Figure 1.12).¹¹ Relatedly, an extensive narrative sequence spanning the lower register of the central apse recounts the legendary transfer of the bodily remains of the town's patron saint, Magnus, from the site of his martyrdom near Fondi to Anagni



1.10. View of second bay frescoes with microcosm diagram in vault, syzygy diagram on left pillar, and portraits of Hippocrates and Galen in lunette, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Author.

Cathedral (Figure 1.13).¹² As Michael Q. Smith aptly demonstrated, this translation cycle was designed as a typological analog to the series of Old Testament narratives about the travels of the Ark of the Covenant.¹³ These narratives, depicted in the vaults above the central aisle, introduce a variety of innovative compositional designs with ornamental crosses, medallions, trapezoids, and kaleidoscopic circles in order to tell the story of the ark's tortuous



1.11. View of frescoes in southwest corner, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

journey across Israel and Philistia (Figure 1.14). The crypt's narrative climax is organized in and around the central apse, where eight painted fields display the events surrounding the reversal of creation foreseen by the prophet John and codified in his Book of Revelation.

That this wondrously diverse collation of iconic, narrative, ornamental, philosophical, prophetic, and theological imagery was meant to be understood as a conceptually unified whole might seem unlikely. Yet, unity is precisely what the crypt's stylistic coherence and spatial continuity convey. Indeed, the frescoes' capacity to hint at their own conceptual unity while at the same time denying access to any such holistic understanding is, to my mind, what makes the Anagni crypt a monument of enduring importance in the history of Italian art. This tension arises particularly at the level of spectatorship. For viewers, the cognitive strain experienced in the face of iconographic complexity is exacerbated by the real-life limitations of embodied spectatorship. Viewers in the



1.12. View of frescoes in left (southwest) apse, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Anagni crypt explore the painted space with eyes and bodies that face the world in one direction at a time; yet the sheer number of painted forms and figures in view makes it difficult to stick to any single interpretive pathway. As viewers move through the space, new paintings come into view and others disappear. This experience is particularly heightened with the vault frescoes, whose concave surfaces can be seen only at a certain proximity, and whose diagrammatic and kaleidoscopic compositions require viewers to turn their bodies while gazing upwards in order to see the images “right side up.” This physical pivoting combined with the diffuse attention induced by the mural’s figural saturation diminishes one’s sense of interpretive directionality in the fresco program as a whole.

As I demonstrate in [Chapter 5](#), the distinct difficulty of interpreting the Anagni crypt was an integral aspect of the mural’s purpose and function. Rather than affording an “external” vantage point from which the mural



1.13. View of central apse with Apocalypse cycle and scenes representing the translation of Magnus's relics to Anagni, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

could be seen in full, the crypt required viewers to experience the frescoes from within, and thereby to experience *themselves* as constituent elements of the monument. In other words, the Anagni crypt made its human beholders experience their physical and cognitive limitations in order to show them that they too belonged to the interconnected world conceptualized in the mural's iconographic program.

PALACE PAINTING IN THIRTEENTH-CENTURY ROME

Prior to the recovery of the Santi Quattro Coronati frescoes, the decades bookended by Honorius IV's splendid apse mosaic at San Paolo fuori le Mura (ca. 1220–30) and Nicholas III's Sancta Sanctorum (ca. 1277–80) seemed almost devoid of significant artistic commissions. In art historical studies, the artistic “void” of the mid-thirteenth century was typically linked to the



1.14. Philistines capture the Ark of the Covenant, vault fresco above central aisle, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

period's political turbulence, marked by the long-drawn-out conflict between the papacy and Emperor Frederick II.¹⁴ The general thinking was that during such volatile times, the typical patrons of large-scale artistic enterprises – popes, cardinals, and members of Rome's nobility – chose to avoid any expenditures that might seem unwarranted or frivolous. Today, almost two decades after the initial discovery of Conti's painted hall, our perspective on the cultural and artistic situation in Rome during the central decades of the thirteenth century has changed radically. We now know that this period witnessed an unprecedented flowering in papal court culture and gave rise to entirely new forms of artistic expression through ambitious projects created for Rome's most prestigious residences. We can now also appreciate that these artistic and cultural developments occurred in parallel with – and to some extent were fueled by – the simmering political rivalry between the papal court in Rome and the Hohenstaufen court in southern Italy.

Most surviving large-scale fresco and mosaic decorations from the thirteenth century are found in Rome's myriad basilicas, including San Paolo fuori le Mura, San Lorenzo fuori le Mura, Santa Maria Maggiore, Santa Maria in Trastevere, and Santa Maria Nova. Generally speaking, these works involved adaptations and refinements to iconographic schemes and compositional modes that had been in circulation for centuries in Rome: symmetrically arranged apse compositions with holy personages set against paradisiacal backgrounds, and narrative sequences featuring biblical and hagiographical stories organized as grids on church walls. What sets the Santi Quattro Coronati murals apart from these ecclesiastical works is their thematic focus on encyclopedic knowledge, their use of complex allegorical modes of representation, and their setting in a cardinal's residence. In the context of Roman art, Conti's frescoes are a rare instance of the survival of medieval palace paintings. However, as shown by the substantial evidence gathered in Serena Romano's recent installations of *La pittura medievale a Roma*, Conti's frescoes were not the only "palace paintings" created in Rome during the thirteenth century. Evidence of contemporaneous non-ecclesiastical paintings exist at San Clemente, San Saba, Santa Maria de Aventino, Abbazia delle Tre Fontane, and the Palazzo Senatorio on the Capitoline Hill. The magnitude and comparable intactness of the Santi Quattro Coronati frescoes allow them to serve as an anchor point around which these more fragmented palace paintings can coalesce. However piecemeal this evidence might be, it leaves little doubt that thirteenth-century Rome was home to a robust corpus of residential and palatial frescoes whose painterly sophistication and thematic innovation rivaled the city's better-known ecclesiastical wall decorations.

Among the most tantalizing fresco fragments to be considered in conjunction with the Santi Quattro Coronati murals are the vivid representations of allegorical animals discovered in the Dominican monastery attached to the basilica of San Clemente.¹⁵ Painted in the mid-thirteenth century, the frescoes likely formed part of a larger decorative program created for Cardinal Raniero Capocci, one of the highest-ranking members of the Roman Curia and an ardent opponent of Emperor Frederick II. His situation at San Clemente appears to have been similar to that of Stefano Conti at Santi Quattro Coronati. Since San Clemente was an ancient *titulus* church to which no cardinal had been assigned during the thirteenth century, Capocci was permitted to develop parts of the monastic complex into an urban palace.¹⁶ The residence appears to have included a frescoed representational hall on the second floor of the east wing of the current monastery – a direct equivalent to the great hall at Santi Quattro Coronati. Alas, today only small sections of these medieval frescoes survive in the roof space of the edifice, providing little indication of what the hall's decorative program looked like in the thirteenth century.¹⁷ While similarly fragmented, the allegorical animals preserved in the

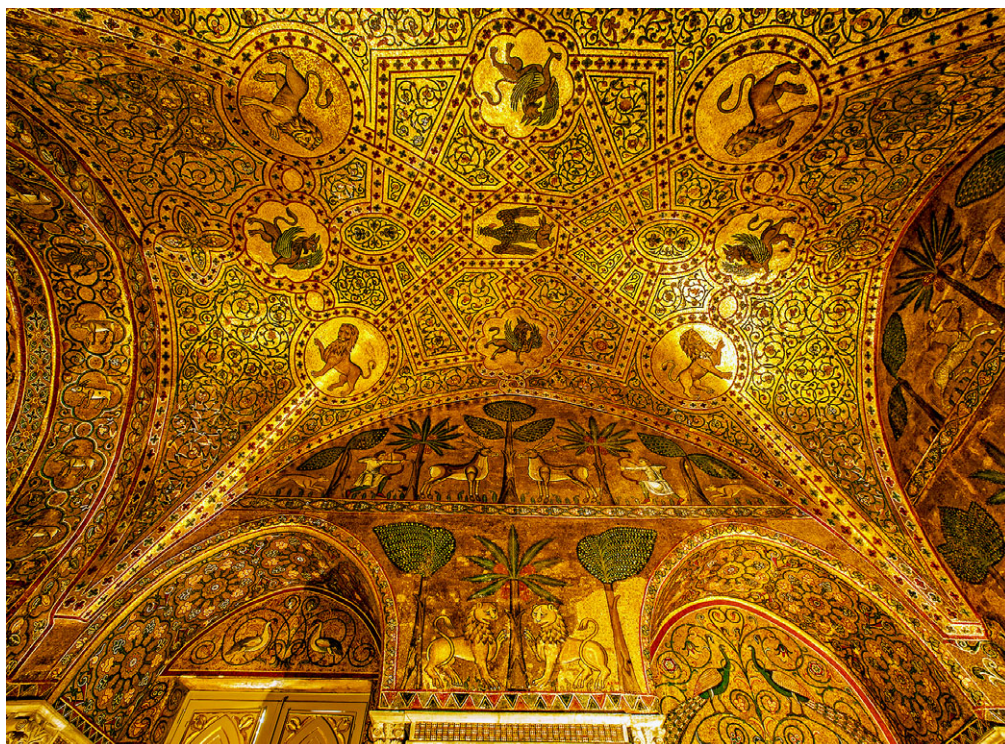
small private chamber of the tower in the north wing give a better sense of the sophistication and thematic outlook of Capocci's mural decorations. Flanking a small window on the west wall are delicately executed representations of a stag and a doe. These are matched, in corresponding locations on the east wall, by images of a snarling lion and a wild griffin sharpening its claws (Figure 1.15). The four creatures appear against blue and green backgrounds strikingly similar to those in Conti's great hall at Santi Quattro Coronati. The snarling lion at San Clemente, as Serena Romano has shown, invites comparison with the related figure found above the principal doorway in the south bay of Conti's hall (Figure 1.16). Taken as a group, the allegorical animals at San Clemente are also evocative of what Eva Hoffman has described as the "international court imagery" found on Byzantine and Islamic textiles as well as in the twelfth-century mosaic decorations of the Norman reception room in the Royal Palace at Palermo (Figure 1.17).¹⁸ The decorative scheme in the Norman hall includes symmetrically arranged images of lions, deer, and griffins rendered in profile. Capocci likely had occasion to see these mosaics during his diplomatic visits to Frederick II's court in Sicily. One such visit was memorably recorded in Leonardo Fibonacci's mathematical treatise *Flos*, which is styled as a dialogue between Capocci and Frederick II.¹⁹ The



1.15. Fragmented frescoes from residential tower in San Clemente monastery, ca. 1250–60, San Clemente, Rome. Photograph: Courtesy of Serena Romano.



1.16. Lion attacking deer, ca. 1244–54, great hall, south wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



1.17. View of mosaic decorations on east wall, reception room, ca. 1150–1200, Royal Norman Palace, Palermo. Photograph: Toni Spagone / Alamy Stock Photo.

iconographic and compositional parallels between the Norman reception room and the frescoes at San Clemente and Santi Quattro Coronati suggest that the latter two monuments formed part of a broader network of Mediterranean court art.



1.18. Cosmological figures, ca. 1250–60, San Saba, Rome. Photograph: Domenico Ventura.

That Rome was party to a Mediterranean courtly culture is confirmed by another set of Roman murals similarly evocative of Sicilian court imagery: the puzzling cosmological images found in the truncated residential tower attached to the basilica of San Saba on the Piccolo Aventino.²⁰ Three frescoed roundels show an enthroned figure flanked by female archers with fluttering veils (Figure 1.18). Scholars have offered differing interpretations of these enigmatic figures, for which few direct iconographic equivalents survive. Most convincing is the suggestion from Irene Quadri, who placed the figures in conversation with the thoroughly illuminated *Liber astrologiae*, a pictorial treatise created for Emperor Frederick II around 1230 by a certain Georgius Fendulus.²¹ The *Liber astrologiae* includes an array of visually compelling, full-page illuminations representing the zodiac signs, the planets in their “celestial houses,” and the decans assigned to each of the twelve constellations (Figure 1.19). Quadri aptly notes that the codex’s images of planets enthroned as medieval rulers resemble the seated figure at San Saba, and, likewise, that several of the figures in the manuscript’s gallery of decans evoke the elegantly draped archers in the frescoes. These iconographic links further suggest that the San Saba murals may have originally featured a more elaborate cosmological scheme that highlighted the complex interconnections between the months of the year and the varied influences exerted by celestial objects on the natural world and human life. If the enthroned human figure at San Saba was indeed intended to represent a planet, it would be one of the earliest known representations of a planetary ruler in medieval Italian monumental art. Along with the allegorical



1.19. Jupiter with Sagittarius and Pisces, ca. 1230, from Georgius Fendulus's *Liber astrologiae*. Paris, Bibliothèque nationale de France, Ms. lat. 7330, fol. 45v. Photograph: Bibliothèque nationale de France.

animals at San Clemente and the myriad erudite pictorial motifs in Stefano Conti's fresco cycle, the San Saba fragments strengthen the well-documented cultural and scientific links between Roman and Sicilian court culture. More and more, we are realizing that, despite the political tensions between the papal and imperial courts during the central decades, the two arenas enjoyed significant intellectual exchange in the realms of science, poetry, and – not least – the visual arts.²²

Calendar imagery is one area in which the newfound frescoes at Santi Quattro Coronati serve an important coalescing role vis-à-vis the larger corpus of medieval Roman palace painting. Judging from the surviving evidence, large-scale calendars executed in fresco formed part of the standard repertoire of thirteenth-century Roman noble and monastic residences.²³ Indeed, Conti's Santi Quattro Coronati residence included two such frescoed calendars. The small room adjacent to the Sylvester Chapel on the ground floor



1.20. Liturgical calendar in room adjacent Sylvester Chapel, detail showing month of February, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

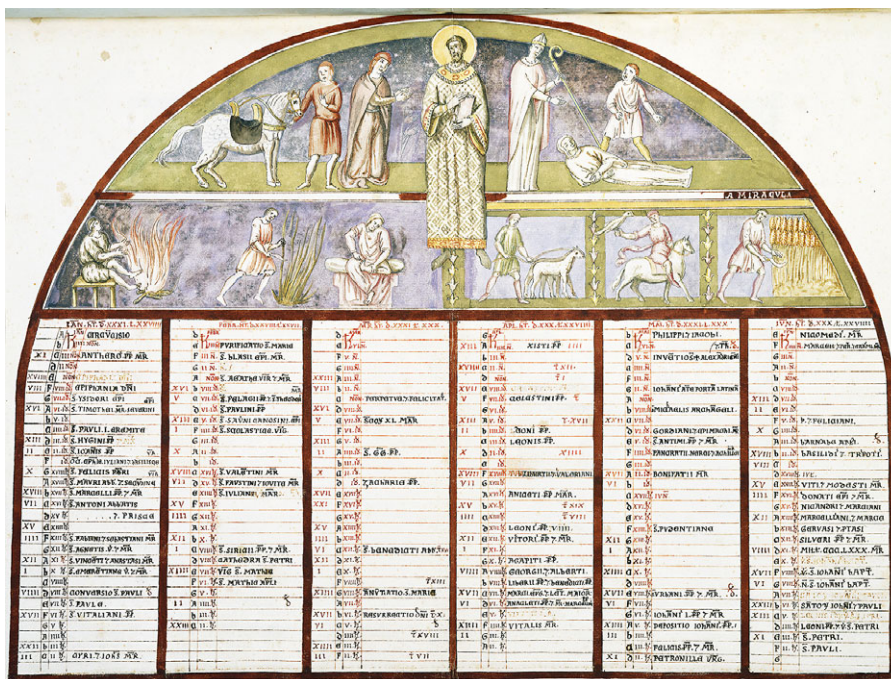
features a (now mostly ruined) liturgical calendar in which the months of the year are represented as large sheets of parchment held by standing figures (Figure 1.20).²⁴ This liturgical almanac is complemented by the frescoes depicting the labors of the months on the walls of the south bay in the great hall. Both the liturgical calendar and the labors of the months establish pictorial and thematic links with a series of other calendars that once decorated the walls of thirteenth-century Roman residences.

The enigmatic fresco scheme at San Saba, for example, included a cycle of the labors of the months alongside the cosmological imagery discussed above. In the cycle's current state of preservation, only the months from August to

December survive (see [Figure 3.15](#)).²⁵ The September scene shows a figure tromping around in a rectangular trough brimming with colorful grapes, while subsequent scenes show a cooper constructing a wine barrel (October), two oxen pulling a plow to till the soil (November), and a pig being slaughtered for meat (December). As discussed in [Chapter 3](#), this sequence of agricultural activities corresponds closely to those represented in Stefano Conti's great hall.

Frescoes depicting the labors of the months were also included in the wall decorations created for a space of unknown dimensions in the medieval Palazzo Senatorio on the Capitoline Hill.²⁶ The few remaining fragments of these murals portray natural scenery and ornamental frames, along with two scenes of labor showing the agricultural activities associated with the summer and fall. In one of the scenes, a farmer has collected a heap of seeds in his cloak for sowing; this activity corresponds to that seen in November at Santi Quattro Coronati (see [Figure 3.3](#)). Another fragment shows two farmers with sticks heaving a heap of grain onto a grinding stone. This threshing is also found at Santi Quattro Coronati, where it appears under July at the center of the south wall. The fragmented calendar frescoes, which today are hidden in a small chamber used for photocopiers, probably formed part of a larger decorative scheme created for a meeting hall used by medieval Rome's trade guilds in the thirteenth century. Irene Quadri has linked the frescoes with a series of interior renovations documented to have taken place in the Palazzo Senatorio in the 1250s. These renovations, according to Quadri's analysis, may have been requested by the Bolognese nobleman Brancalone degli Andalò, who served as Rome's senator in 1252–5 and again in 1257–8.²⁷

Another large-scale calendar mural was created for the portico of the monastic residence at Santa Maria de Aventino at some point in the 1240s or 1250s.²⁸ Destroyed during Giovanni Battista Piranesi's remodeling of the church and monastery in 1765, the frescoes had been recorded a century or so earlier in watercolor drawings created by Antonio Eclissi on commission from the Italian collector Cassiano dal Pozzo.²⁹ Eclissi's drawings show two frescoed lunettes, each decorated with a detailed liturgical calendar organized as six columns of text superimposed with images of the labors of the months ([Figure 1.21](#)). When Eclissi produced his drawings in the mid-seventeenth century, the fresco showing the first half of the calendar year (January–June) appears to have been fully intact while that representing the second half (July–December) was already badly damaged. Eclissi's drawings show two lunette-shaped frescoes that were clearly made for a vaulted portico. The upper portion of the first fresco includes the portrait of a deacon saint flanked by two unidentified hagiographical stories. At the top left, a nobleman kneels in prayer before the saintly figure while a servant attends to his horse. At the top right, a bishop addresses a sick woman lying on the ground with a young boy



1.21. Watercolor by Antonio Eclissi showing calendar cycle from lost frescoes at Santa Maria de Aventino, Rome (ca. 1250), Royal Library at Windsor Castle, Windsor RL 9217. Photograph: Royal Collection Trust / © His Majesty King Charles III 2023.

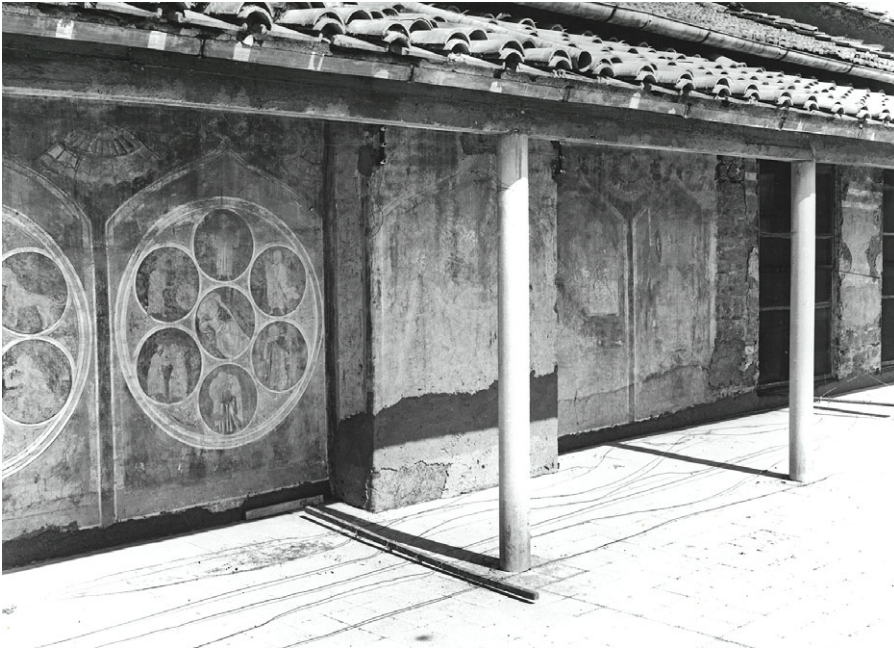
(presumably her son) standing beside her. The presence of a truncated caption, *MIRACVLA*, along the lower border suggests a story of healing.

Organized as a horizontal strip below the hagiographical stories are the agricultural and courtly activities associated with the months of the year. January is depicted as a man seated before a fire, February as a young farmer pruning a thicket, March as an enthroned woman removing a thorn from her foot, April as a boy herding sheep, May as a nobleman riding with a falcon on his right arm, and June as a man harvesting grain. This iconographic program aligns closely with that in the great hall at Santi Quattro Coronati, although the latter fleshed out its agricultural motifs into more elaborate scenes with multiple figures.³⁰ The lost Aventine fresco combined two types of calendars into a single composition. While the labors at Santa Maria de Aventino were comparably spartan versions of the agricultural scenes in Conti's great hall, the detailed columnar calendar displayed in the lower part of Eclissi's drawing was as scholarly in nature as the liturgical calendar decorating the Sylvester Chapel's antechamber (Figure 1.20). These text-based calendars were to some extent frescoed versions of the type more commonly seen in liturgical manuscripts. The close adherence to manuscript conventions can be observed in the neatly gridded boxes of each calendar "page," and in the use of alternating black and red script against backgrounds that clearly imitated parchment. Like liturgical

calendars in manuscript form, these mural calendars required not only basic literacy but also a more intricate understanding of the computational systems that underpinned medieval time measurement. In order for the Santa Maria de Aventino and Santi Quattro Coronati calendars to function perpetually, viewers had to perform their own calculations for determining when important dates would occur. For example, to determine the date of Easter Sunday in a given year, viewers could use the “golden” numbers of the metonic cycle (both calendars include these numbers in the far left column of each calendar page), along with the hebdomadal letters corresponding to the day of the week (inscribed in the second column from left), to calculate the precise date for the first Sunday after the full moon that occurs on or after the vernal equinox.

The liturgical calendars at Santi Quattro Coronati and Santa Maria de Aventino were overtly interactive images that transposed aspects of learned manuscript culture into the medium of wall painting. This particular type of calendar appears to have been quite popular in thirteenth-century Rome, for another such calendric frieze is known to have decorated the portico of the monastic residence at the Cistercian abbey of Tre Fontane on the ancient Via Laurentina.³¹ These frescoes were visible as late as the eighteenth century, when they were recorded in a drawing by Seroux d’Agincourt. The drawing produced by the French archeologist shows that the almanac was organized horizontally in the manner of a Gothic clerestory with tri-lobed window niches populated by male figures unfurling scrolls of parchment.³² The design closely matched the one preserved in the ground-floor antechamber at Santi Quattro Coronati. The latter, as Silvia Maddalo has suggested, may well have served as inspiration for the calendar at Tre Fontane.³³

The newfound frescoes at Quattro Coronati have also impacted our understanding of the so-called Vita Humana murals at Tre Fontane, commonly dated to around 1300.³⁴ The nine surviving panels of the Vita Humana cycle originally formed part of a substantial mural scheme created for the great hall in the abbot’s quarters at the Cistercian monastery (Figure 1.22). Like the clerestory-level paintings in Cardinal Conti’s great hall, the Tre Fontane frescoes feature sophisticated allegorical representations set against ogive-arched windows to form a horizontal gallery. The Tre Fontane frescoes include two unusual wheel diagrams that outline the conditions of human mortality and sensibility (Figures 1.23 and 1.24). These diagrams combine with an eclectic selection of motifs drawn from medieval bestiaries, fable collections, and the Old Testament. In her authoritative analysis of the murals, Kristin Aavitsland has shown that the cycle’s disparate pictorial motifs can be understood as a visual *florilegium* aimed at encouraging associative meditation on the basic conditions of postlapsarian human existence.³⁵ This contemplative cycle opens with a representation of the physical hardship suffered by Adam and Eve beyond the gates of Eden. Considered in the context of the other eight panels,



1.22. Vita Humana frescoes at monastery of Tre Fontane as seen in photograph taken at the time of their discovery in the 1960s. Photograph: Reproduced with permission from Istituto Centrale per il Catalogo e la Documentazione – MiC.

the singular biblical scene appears excerpted from its broader narrative context to serve as a springboard for speculation around the origins of the human condition and the idea that manual labor could serve as a means to salvation in accordance with Cistercian thinking.³⁶ Subsequent scenes in the cycle define the distinctive characteristics of human existence from a variety of perspectives. A wheel diagram portrays the five senses of the human body through symbolic representations of animals in whom each of the senses was believed to be well developed: a spider for the sense of touch, an ape for taste, a wild boar for hearing, a hound for smell, and a lynx and an eagle for vision. The animal symbols are arranged in six medallions encircling a central medallion that bears the image of a man in his youth, the phase of life when one is most susceptible to the senses. This diagram is accompanied by a second formally equivalent wheel diagram showing the various stages of human life, from childhood through old age to death, pictured as an old man on his deathbed at the diagram's center.

According to Aavitsland, the two wheel diagrams are best understood as rhetorical "*exempla*," in the sense that their neat geometric organization modeled the way medieval students were taught to mentally organize knowledge in the form of easily retrievable "memory pictures."³⁷ As such, the two diagrams underscore the intellectual engagement that the Vita Humana frescoes were intended to solicit. Each panel functioned as an



1.23. Fresco showing Wheel of the Senses, ca. 1300, abbey of Tre Fontane, Rome. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

externalized memory picture that could trigger a chain reaction of internal memory pictures in the minds of beholders. The wheel diagrams invited spiritual meditation around the vanity of sensory pleasure and the transitory nature of human life. In turn, contemplation of these aspects of the human condition would induce more edifying forms of thinking around actionable strategies for avoiding sinful indulgence and for overcoming corporeal transience through ascetic living in accordance with the principle of *contemptus mundi*, or disdain for the world.

The Vita Humana frescoes postdate the Quattro Coronati murals by half a century, and there are important formal, iconographic, and contextual



1.24. Fresco showing Wheel of the Ages, ca. 1300, abbey of Tre Fontane, Rome. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

differences between the two monuments. Yet, their shared characteristics are worth highlighting. Both fresco cycles demonstrate an interest in defining the distinct conditions of human existence, and in deploying erudite and interpretively challenging motifs to spur sustained intellectual engagement. Both were created for large representational spaces where members of Rome's ecclesiastical elite would meet, dine, and engage in conversation. Both were "rediscovered" after centuries of oblivion – the Tre Fontane frescoes in 1960 and the Quattro Coronati murals in 1995 – and even though these retrievals were both cases of happenstance, their rediscovery served to

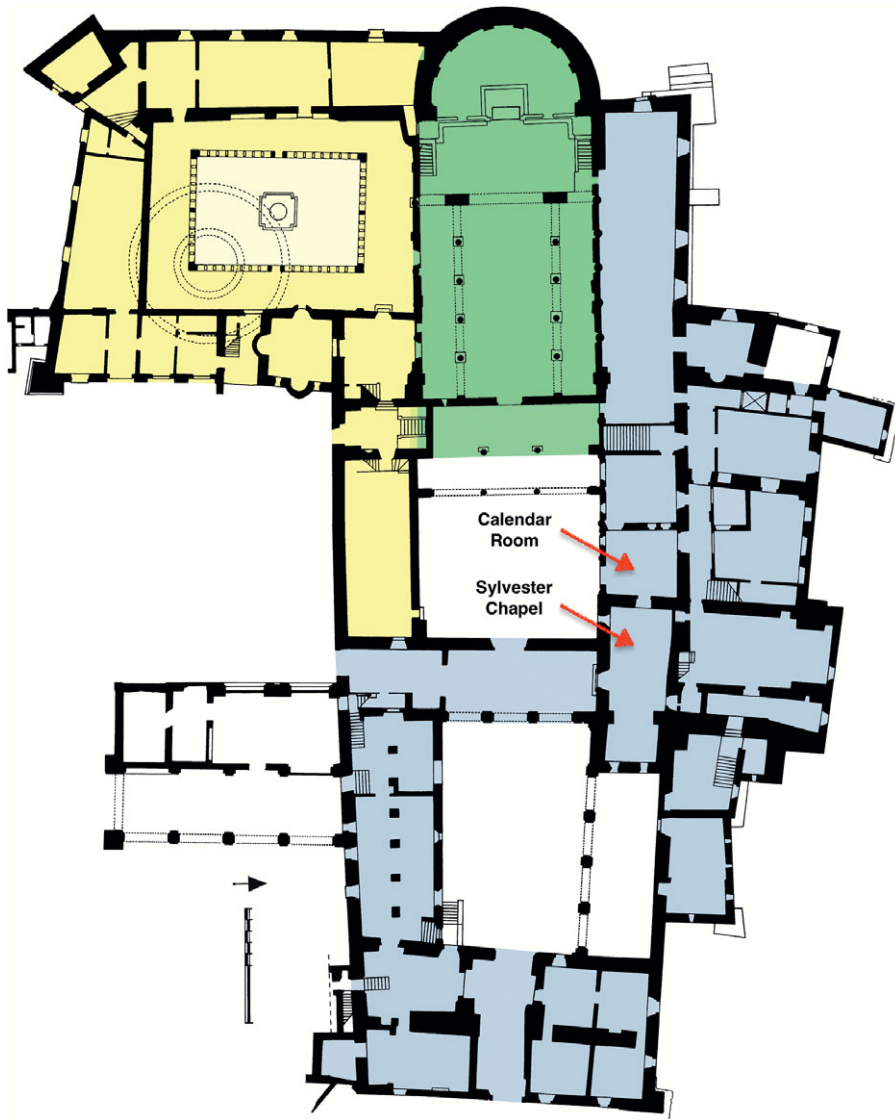
underscore the sheer quantities of medieval Roman palace paintings that have been lost permanently. To us, these monuments surely appear more unusual than they did to the eyes of Rome's thirteenth-century elite, who were likely just as accustomed to allegorical palace frescoes as they were to the mesmerizing apse mosaics and grand narrative cycles that we tend to associate with "medieval Roman art."

ART, KNOWLEDGE, AND PAPAL POLITICS

Cardinal Conti's great hall is situated on the second floor of a large tower that forms part of the medieval palace attached to the twelfth-century church of Santi Quattro Coronati (Figures 1.25–1.27).³⁸ According to a dedicatory inscription found in the complex's ground-floor chapel, the palace was built on commission from Stefano Conti and completed by 1246.³⁹ Stefano was a particularly well-connected cardinal of the Roman Curia. His family, the powerful Conti clan of Anagni, was the dominant force in Roman politics during the first half of the thirteenth century. Stefano's uncle, Lotario dei Conti di Segni, had ruled for eighteen years as Pope Innocent III (1198–1216); and two other relatives, Ugolino and Rinaldo, ruled as popes Gregory IX (1227–41) and Alexander IV (1254–61), respectively.⁴⁰ The family also enjoyed significant influence in Roman civic affairs. Stefano's father, Riccardo Conti, was a powerful nobleman whose wealth and authority were

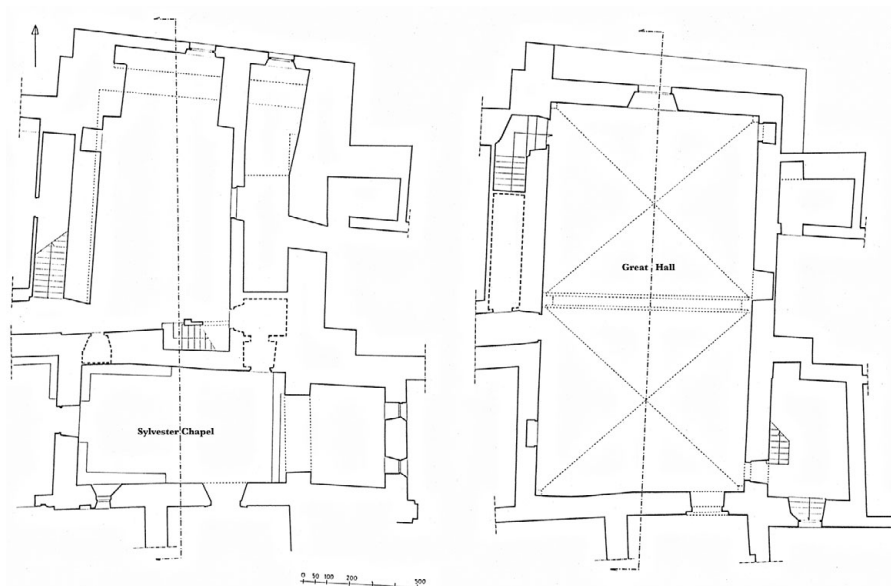


1.25. View of Santi Quattro Coronati Complex; arrow shows location of painted hall. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.



1.26. Thirteenth-century layout of Santi Quattro Coronati complex; cardinal's residence in blue; twelfth-century basilica in green; Benedictine monastery in yellow. Image: Lia Barelli.

emblemized in the largest of Rome's baronial towers, known as the Torre dei Conti, the base of which still rises above the Forum of Nerva.⁴¹ In 1216, Pope Innocent III appointed Stefano as cardinal deacon of the church of Saint Hadrian, housed in the former Curia Julia on the Roman Forum. In 1228, Stefano was promoted by Pope Gregory IX to cardinal presbyter of Santa Maria in Trastevere. The relatively small size of the college of cardinals in the period allowed Stefano to remain titular cardinal of the trans-Tiberian basilica and at the same time develop Santi Quattro Coronati into a lavishly decorated residence for himself.⁴² Located a few hundred meters from the Lateran, the



1.27. Partial plan of cardinal's residence, Santi Quattro Coronati; left plan shows ground floor with Sylvester Chapel; right plan shows second floor with great hall. Image: Lia Barelli.

venerable basilica had been reconstructed in the twelfth century as a relatively small church set within a significantly larger architectural shell. This diminution made it possible for Stefano Conti to integrate parts of the old basilica into his new palace.⁴³ In the decades following Stefano's death in 1254, the Santi Quattro Coronati residence would remain one of Rome's most desirable dwellings. It served as home to Charles I of Anjou during the Sicilian king's stint as senator of Rome, and later as cardinalate residence to personages including Ottaviano degli Ubaldini – apparently known to his contemporaries as “the Cardinal” – and the notorious Benedetto Caetani, who would later rise to Saint Peter's chair as Boniface VIII (1297–1304).⁴⁴

Stefano Conti's curial career coincided with two important developments in the history of the medieval papacy. The central decades of the thirteenth century witnessed an unprecedented cultural flowering at the papal court due to its active recruitment of learned individuals and its embrace of the “new” learning made available through translations of ancient and medieval Arabic texts. This very same period was marked by the long-drawn-out conflict between the papacy and its great imperial rival to the south, Frederick II of Hohenstaufen. This conflict had started in 1198, when Frederick was crowned king of Sicily at age three. At the time, Stefano's uncle, the newly elected Pope Innocent III, was named as the young ruler's guardian while the eminent Cardinal Cencio Savelli (later Pope Honorius III) was appointed as Frederick's tutor. Pope Innocent had planned to groom Frederick into a papal ward and prevent the young king from assuming titles

and powers that might eventually threaten the papal state. The plan, however, proved unsuccessful. Frederick quickly amassed significant military strength and diplomatic support to position himself as a true rival to papal power. In 1220, Honorius III agreed to crown his former pupil Holy Roman Emperor on the understanding that Frederick would immediately bring his armies east to salvage the Fifth Crusade (or, God forbid, be killed in the effort). However, to the papacy's great annoyance, Frederick delayed his departure for the Holy Land indefinitely, devoting his efforts instead to securing territorial holdings on the Italian peninsula.

Under Pope Gregory IX, the papacy took a firmer line. Immediately upon his ascension to the papal throne in 1227, Gregory excommunicated Frederick and dispatched the papal army to reclaim lands that had been seized by the emperor from Riccardo Conti (father to Stefano Conti and uncle to Gregory IX) in southern Italy. A shaky truce between the pope and Frederick was brokered in 1230 in Anagni, but the tension between them continued until 1239, when Gregory excommunicated the emperor for a second time and launched a vociferous propaganda campaign against the empire.⁴⁵ By the time Innocent IV (1243–54) was elected, the war had reached a climax: Frederick stationed his troops to the north of Rome and the pope fled in secrecy to Lyons to seek protection from the French King Louis IX. From his new base in Lyons, Pope Innocent renewed the emperor's excommunication in forceful terms. However, despite the epistolary bravado issuing from his chancery, the pontiff decided to remain north of the Alps until Frederick's death from dysentery in 1250 made it safe to return to the Italian peninsula.

This politically turbulent period was also a time of significant cultural expansion at the papal and imperial courts. Historical records show that the two courts developed into vibrant arenas of intellectual discourse as both Frederick and his papal rivals actively recruited university-educated administrators as well as doctors, scientists, and artists to their respective entourages.⁴⁶ These parallel efforts at curial intellectualization were in part practical responses to growing bureaucratic needs, but they were also important extensions of the political rivalry between the pope and the emperor. Rather than impede cultural expansion, the political conflict appears to have stimulated the period's artistic and epistemic flowering. Not only did scholars and artists gain increased access to financial support as the two courts vied for their services; the circulation of texts and learned men between the two cultural arenas also spurred productive intellectual exchange, as Agostino Paravicini Bagliani has aptly demonstrated.⁴⁷

Stefano Conti's murals responded to these complexly intertwined historical circumstances. This was particularly so with the Sylvester Chapel frescoes, which advanced an unambiguous assertion of papal power at a time when Frederick remained camped on Rome's doorstep.⁴⁸ With Pope Innocent and

most of the Curia in self-imposed exile across the Alps, Stefano Conti was one of four cardinals selected to stay behind and handle the affairs of the papal state and direct the ongoing war with Frederick. From his fortified residence at Santi Quattro Coronati, Stefano effectively ruled the city for about a decade (ca. 1244–54) as the papally appointed cardinal vicar of Rome (*vicarius urbis Romae*).⁴⁹ During this period, the cardinal publicly declared – on two occasions, in 1246 and again in 1248 – the church’s crusade against Frederick.⁵⁰ Conti’s Sylvester Chapel frescoes were in many ways conceived as a pictorial complement to this verbal propaganda.⁵¹ Designed as political spin in visual narrative form, the paintings reminded viewers of how the fourth-century emperor Constantine had (allegedly) agreed to transfer authority in all religious *and* temporal matters to the then pope Sylvester (d. 335). Across the painted cycle, Constantine is depicted as submissive toward Sylvester; in one scene the emperor is seen humbly walking on foot as he leads the pontiff’s white horse toward the Lateran Palace (Figure 1.28).⁵² The procession motif was a deliberately anachronistic reference to a feudal ritual of homage known as the “office of the groom” (*officium stratoris*).⁵³ Its use in the Sylvester Chapel invited viewers to metaphorically project the ongoing political struggle between Innocent IV and Frederick II onto the fourth-century tale of Constantine’s transfer of power, which centuries earlier had been codified in the spurious



1.28. Fresco showing *officium stratoris* (Constantine escorting Sylvester’s horse in a symbolic act of submission), ca. 1246–7, Sylvester Chapel, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

legal charter known as the Donation of Constantine.⁵⁴ In this way, Conti's narrative frescoes extended the ongoing propaganda war between the imperial and papal chanceries, wherein both sides made inventive use of the forged document.⁵⁵

The murals in Santi Quattro Coronati's great hall expanded the jurisdictional claims of the Sylvester frescoes to include all essential temporal knowledge, including time reckoning, agronomy, astrology, moral law, and antiquarianism, along with the philological and mathematical disciplines. Considered as a whole, and seen in its political context, Conti's frescoed hall articulates the papal Curia's embrace of worldly knowledge as an aspect of political power. This newly fashioned identity for the papacy, as a cultured monarchy and a proprietor of learning, is neatly encapsulated in the figure of King Solomon. The biblical ruler is positioned at the center of the north wall frescoes, flanked by a cortège of armored virtues, and directly in the line of sight of visitors entering through the principal doorway (Figures 1.6 and 1.29). King Solomon was understood by his thirteenth-century interpreters as a model ruler who combined virtuous kingship with divinely ordained wisdom. Such widespread admiration for the biblical ruler lies behind the epithet "new Solomon," which was lavished on Frederick II as well as on Pope Innocent III to describe their mastery of worldly knowledge, particularly in the realm of law.⁵⁶ The figure of Solomon at Santi Quattro Coronati was perhaps intended as homage to the late Innocent III, whose eighteen-year reign had launched the papacy's embrace of scholarship and, not least, the Conti family's decades-long dominance in curial politics. The murals depict Solomon in the guise of an Ancient Roman emperor so as to implicitly proclaim the pope as the true heir to the religious and temporal powers once possessed by Constantine, and now "illegitimately" claimed by Frederick.

In the north bay frescoes, Solomon is the central figure around which Conti's innovative cycle of virtues and vices revolves. Several of the vanquished villains in this allegorical cycle were thinly veiled pictorial allusions to Frederick. The myriad broadsides issued by the papal chancery against the emperor left no doubt that the church perceived Frederick not only as the present-day arch-nemesis of the pope but as an embodiment of the Antichrist.⁵⁷ For example, in a pamphlet issued by Gregory IX in 1239, titled "A beast rose from the sea" (*Ascendit de mare bestia*), the pontiff likened Frederick to the apocalyptic dragon Leviathan.⁵⁸ Stefano Conti's virtues cycle engaged with these rhetorical polemics; several of the foes trampled underfoot by the virtues – particularly Pharaoh, Nero, Simon Magus, and Muhammad – were understood in strikingly similar terms as historical incarnations of the Leviathan/Antichrist motif. Like Prudentius's allegorical portrayal of battles between the virtues and vices in the *Psychomachia*, the scriptural passages describing God's battles against the sea monster were metaphorical renderings



1.29. Fresco showing King Solomon, ca. 1244–54. Detail from north wall, north bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

of the struggle between good and evil, and between order and chaos. Conti's virtues cycle thus framed the papacy's conflict with Frederick as an extension of the church's historical struggles against the forces of chaos and evil. In the same way that the mural program as a whole cast the papacy as the implicit heir

to Solomon's wisdom, the virtues cycle in the north bay implicitly cast Frederick as an historical agent of chaos in the molds of Pharaoh and Nero.

In this context, too, the murals in the crypt of Anagni offer additional evidence of the papacy's development of monumental painting as an instrument of political propaganda. Aspects of these wondrously diverse fresco decorations can be understood as veiled commentaries on the contemporaneous political struggle between Frederick II and Pope Gregory IX, who in all likelihood sponsored the crypt's murals. This is particularly so with the episodes drawn from John's Revelation in the crypt's main apse and its surrounding walls, which align with the eschatological outlook of Conti's virtues cycle. Frederick Hugenholtz, in his rigorous historical analysis of the Anagni crypt, argued that the crypt's apocalypse frescoes should be interpreted in the context of Gregory IX's well-documented preoccupation with the world's apocalyptic end and the pope's frequent characterizations of Frederick II as the Antichrist (see [Figure 1.13](#)).⁵⁹ According to Hugenholtz, the Revelation cycle at Anagni was intended as a papal "manifesto" directed at the emperor. The cycle was an attempt to situate the period's political conflict in an eschatologically informed history in which the papacy belonged on the side of Christ, whose victorious return would bring an end to the line of temporal usurpers to which Emperor Frederick II belonged.⁶⁰ Other individual images in Anagni have also been interpreted as motivated by the period's papal-imperial polemics. Miklos Boskovits, for example, has argued that the scene of Saul's anointment by Samuel in the south aisle asserted the power of the pontiff to bestow the title of king ([Figure 1.30](#)). Thus, in Boskovits's interpretation, Samuel and Saul were to be understood as allegories of Gregory IX and Frederick II, respectively.⁶¹

Beyond their political facets, the Anagni frescoes constitute one of the most important historical testaments to the thirteenth-century papacy's interest in worldly knowledge. Clustered around the crypt's entrance is a collection of cosmological diagrams, including images of the microcosm, the zodiac, and planets, along with a so-called syzygy schema outlining the connections between the four elements and their physical properties. Accompanying these cosmological diagrams are portraits of four (no longer identifiable) astrologers and the ancient physicians Hippocrates and Galen. These erudite motifs are exceedingly rare in the realm of monumental painting and were clearly directed at the highly educated members of the papal Curia. As will be seen in [Chapter 5](#), the cosmological images at Anagni commemorated the thirteenth-century papacy's cultivation of astrology and medicine, which were valued for their immediate practical utility in the realm of politics. Astrology and other predictive arts could be harnessed to procure advance knowledge of future events, including natural phenomena, forthcoming wars, and the future fates of individual persons. The utility of medicine was its ability to safeguard one's continued rise in the curial hierarchy by curing ailments and slowing the



1.30. Fresco showing anointment of Saul as king of Israel by Samuel, ca. 1231–55. Detail of narrative vault with stories of Samuel and Saul, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

body's natural corruption. As Paravicini Bagliani has shown, members of the thirteenth-century Curia harbored significant anxiety about illness, death, and the brevity of life.⁶² Indeed, the presence of the pope and his court in Anagni was directly related to curial members' wish to avoid the "incendiary air" and malarial "fevers" that plagued Rome in the hot summer months.⁶³ The medieval papacy was an institution that rewarded longevity; any cardinal with his sights set on Saint Peter's chair needed, before all else, to outlive whoever currently occupied it. On the other hand, pontiffs were considered to be particularly susceptible to illness and death; medieval popes were commonly elected toward the ends of their lives and, once elevated, "never lived very long, but died in a short space of time," as Peter Damian noted in his treatise *On Brevity*.⁶⁴ Recognition of the political implications of illness and mortality was an important motivating factor for the thirteenth-century papacy's cultivation of worldly knowledge. The Anagni frescoes engaged with these cultural and political developments by placing pictorial motifs for astrology, medicine, and cosmology in conversation with a larger mural program devoted to broad philosophical speculation about sacred history, political eschatology, and the place of humankind in the cosmos.

The process by which thirteenth-century court culture became intellectualized was multifaceted. There was, on the one hand, increased emphasis on education among the clerical elite.⁶⁵ From Innocent III onward, possessing a degree from one of Europe's burgeoning universities became a de facto

criterion for promotion within the curial hierarchy.⁶⁶ By midcentury, this consistent practice of promoting candidates with master's degrees to the college of cardinals had turned the court into a circle of rigorously educated and comparatively outward-looking individuals. Increasingly, curial members had been exposed to Aristotelian and Islamic philosophical writings, which were commonly discussed and disseminated in thirteenth-century university circles.⁶⁷ Such increased exposure to new and at times controversial lines of thinking spurred a concerted expansion in the kinds of learning considered within the papacy's purview. In addition to their traditional focus on theology and law, popes and cardinals now actively cultivated natural philosophy and what Roger Bacon termed "experimental science."⁶⁸ These forms of knowledge were increasingly understood as necessary instruments for the church's continued supremacy in political affairs.⁶⁹

The first phase of this intensified cultivation of worldly knowledge can be traced to the 1220s, when the translator and polymath Michael Scot appears to have enjoyed the patronage of popes Honorius III and Gregory IX.⁷⁰ A papal decree of the time describes Scot as an eminent scholar and declares that "the apostolic seat delights in erudite men."⁷¹ In the late 1220s, Scot moved on to the court of Frederick II in Sicily, where he served as court astrologer and continued his translation activities while also producing original writings on topics ranging from cosmology and music to physiognomy, alchemy, and the healing arts.⁷² Scot was one of several scholars employed by both pope and emperor, demonstrating what Steven Williams calls a "shared cultural world of the papal and imperial courts."⁷³ Texts and manuscripts also appear to have moved with ease between the two courts. A treatise on delaying the misfortunes of old age (*De retardatione accidentium senectutis*), written by a certain Dominus Castri Goet in the 1240s, exists in two slightly different versions, one of which bears a dedication to Innocent IV and the other to Frederick II.⁷⁴ The treatise incorporates material from a small handbook known as the "Secret of Secrets" (*Secretum secretorum*), which had been translated from Arabic into Latin in around 1230 by a papal cleric known as Philip of Tripoli.⁷⁵ At the time, it was believed that the "Secret of Secrets" had been written by Aristotle and comprised a collection of exclusive and confidential advice addressed to Alexander the Great.⁷⁶ Organized as a small encyclopedia for kings and other rulers, the book includes discourses on government, medicine, and astrology, as well as more occult sciences, including alchemy and lapidary magic.⁷⁷ The text enjoyed widespread circulation at both the papal and imperial courts, and its Aristotelian advice was incorporated into other learned texts, including the writings of Michael Scot and Roger Bacon.⁷⁸ As Williams has demonstrated, the micro-history of the "Secret of Secrets" and its introduction to the Latin West via the papal court is emblematic of the papacy's receptive attitude to "new" Greek and Arabic learning. It is one of many examples that capture the

pivotal role of the Curia as a center for translation and the production of new knowledge in the first half of the thirteenth century.

THE SANTI QUATTRO CORONATI MURALS AND VISUAL ENCYCLOPEDIISM

Conti's Santi Quattro Coronati frescoes demonstrate that the Curia's cultural expansion in the thirteenth century extended to the realm of mural painting. They also suggest that the papacy's political struggles prompted artistic innovation as a complement to the written propaganda issuing from the Curia's chancery. Yet, the frescoes at Santi Quattro Coronati can also be examined in relation to a significantly broader development in medieval culture: what might be described as the "encyclopedism" of the scholastic period.⁷⁹ Viewed in this light, Conti's murals attest to the broadening interest in the production of knowledge-ordering works, which found expression in the realms of prose and poetry, as well as in the visual arts.

Among the most widely disseminated prose encyclopedias of the scholastic period were Alexander Neckham's *De naturis rerum*, Thomas of Cantimpre's *De natura rerum*, Bartholomeus Anglicus's *De proprietatibus rerum*, Vincent of Beauvais's *Speculum maius*, Honorius of Autun's *Imago mundi*, and Brunetto Latini's *Le livre du trésor*. Like the early medieval compendia of knowledge on which they were modeled, these texts sought to condense the contents of an entire scholarly library into a single volume by synthesizing Greco-Roman knowledge with scriptural materials and theological writings.⁸⁰ While none of these works were known as "encyclopedias" in the period, they nevertheless conform to our modern understanding of the term.⁸¹ Medieval compendia of knowledge were organized in accordance with overarching concepts, which were usually theological and philosophical in nature, such as the six days of creation or the analogy between microcosm and macrocosm.⁸² Furthermore, like modern encyclopedias, medieval books of knowledge aspired to a certain completeness of coverage, with individual articles on topics ranging from the verbal and mathematical sciences, medicine, law, and theology to geography, agriculture, food, the things of nature, and everyday objects such as tools and clothing. These individual entries were typically written with a certain rhetoric of objectivity and appear to have been aimed at moderately educated audiences.

To describe Conti's great hall as "encyclopedic" is not to say that written compendia of knowledge served as direct sources for the varied pictorial motifs contained within its fresco cycle. To be sure, the iconographic program at Santi Quattro Coronati, with its combinatory treatment of worldly and theological knowledge, resembles the thematic substance of textual encyclopedias. Yet, there are other important factors that contributed to the frescoes'

encyclopedic character. Among the hallmarks of medieval books of knowledge were their organizational logic and commitment to the idea of completeness. Regardless of the medium in which they were expressed, and regardless of their actual content, all medieval encyclopedias advanced a certain rhetorical claim to comprehensiveness. To my mind, it is this rhetorical posture that most intimately connects the great variety of encyclopedias produced during the scholastic period to the Santi Quattro Coronati frescoes. Conti's mural cycle reinforces the impression of encyclopedic comprehensiveness through its uniform color scheme, stylistic coherence, painted framework, and treatment of architectural space. In the great hall at Santi Quattro Coronati, fresco decorations extend across four walls and two vaults in such a way that architectural space and painting conjointly create the effect of visual and spatial enclosure. When combined with a stylistically uniform pictorial program that is iconographically premised on the notion of comprehensive knowledge, these spatial characteristics assume their own form of encyclopedic rhetoric. As discussed below, historical viewers could experience the frescoed room as a thematically and stylistically uniform "knowledge-whole" comprised of carefully selected "knowledge-parts" (the liberal arts, the months, the seasons, the virtues, the vices, and the stars and planets). Additionally, the fact that the mural as a whole could never be seen in its entirety but always only in its parts strengthened the encyclopedic rhetoric of the space. The potential for comprehensiveness was kept alive by its non-availability to direct visual verification.

The scholastic period saw not only an increase in the production of encyclopedic works but also increased interest in visualizing knowledge through the use of pictorial structures such as diagrams, tables, charts, and maps.⁸³ These concurrent developments in medieval culture underpinned the creation of "visual encyclopedias," knowledge-ordering works in which images served as the primary mode of communication. Examples of visually dominant encyclopedic manuscripts include Herrad of Landesberg's *Hortus deliciarum* (ca. 1176–96) and Lambert of Saint-Omer's *Liber floridus* (ca. 1120).⁸⁴ These richly illuminated codices included a wide variety of diagrams, tables, maps, and other pictorial structures for visualizing knowledge (Figure 1.31). In these manuscripts, images and figures did not merely "illustrate" the codices' textual contents but instead functioned as self-sufficient pictorial articulations of theological, moral, and philosophical forms of knowledge. Other examples of intrinsically visual encyclopedic manuscripts include spectacular world maps such as the Hereford Mappa Mundi and the Ebstorf Map, both produced around 1300 (Figure 1.32).⁸⁵ These large-scale sheets of parchment layered historical, theological, and mythological knowledge onto the geographic framework of the known world.⁸⁶ In both maps, the geographic world was drawn as a circle with the three continents – Asia, Europe, and Africa – arranged around Jerusalem at the center. Alongside geographic locations were



1.31. The Ages of the World, ca. 1120, from copy of Lambert of Saint-Omer's *Liber Floridus*. Ghent, Universiteitsbibliotheek Gent, Ms. 92, fol. 19v. Photograph: Ghent University Library.

texts and images conveying information drawn from biblical stories, classical myths, prophetic material, theological writings, bestiaries, and books of nature. By combining this diverse subject matter within the confines of a circular composition, the Hereford and Ebstorf maps generated distinctly encyclopedic



1.32. Modern facsimile of Ebstorf Map. The original was created ca. 1235–40 on a vast piece of parchment made from thirty goat hides. It was housed at the women's convent on the Lüneburg heath in Lower Saxony, where it was destroyed in 1943. Photograph: Wikimedia Commons.

effects. Viewers were presented with vast pictures that appeared to show not only the spatial extent of the world but also its entire history and sacred significance, as though the material and spiritual dimensions of creation had been brought together in a single image.

The twelfth century gave rise to the celebrated portal programs of French cathedrals, which the nineteenth-century art historian Émile Mâle memorably interpreted as encyclopedias fashioned in stone.⁸⁷ The west portals of the cathedrals of Saint-Denis and Chartres, for example, displayed coherent systems of knowledge, wherein sculptural representations of the months, the zodiac signs, and (at Chartres) the liberal arts were integrated within theologically grounded schemata of Christian salvation history. As Conrad Rudolph has shown, such programs of architecturally embedded sculptures introduced a new form of erudite public art in which theoretical concepts and complex ideas could be elucidated not only through individual figures but also through

the innovative systematization of knowledge components into coherent spatial wholes.⁸⁸ From the mid-thirteenth century onward, comparable large-scale programs of knowledge executed in sculpture and fresco emerged on the Italian peninsula as well. Prominent examples include the Fontana Maggiore in Perugia (ca. 1278), the Florentine campanile reliefs (ca. 1340–60), Ambrogio Lorenzetti's Sala dei Nove frescoes in Siena (1337–40), the sculpted capitals of the Doge's Palace in Venice (1342–8), and Andrea di Bonaiuto's frescoes in the Dominican chapterhouse at Santa Maria Novella in Florence (ca. 1369). In a seminal 1896 study, Julius von Schlosser charted the rise and development of these and other “encyclopedic picture-cycles” (*enzyklopädischer Bildkreise*) from twelfth-century France, via the Angevin court and the burgeoning civic cultures of late medieval Italy, to their alleged artistic culmination in Raphael's Stanza della Segnatura.⁸⁹ In strictly chronological terms, Stefano Conti's rediscovered murals slot in between French sculptural programs and the Italian works mentioned above, many of which were created for civic contexts. One wonders what role the Santi Quattro Coronati frescoes would have played in von Schlosser's grand historical narrative, had they been discovered a century and a half earlier than they were.

The medieval emphasis on visualizing knowledge in the creation of encyclopedic works was not limited to traditional pictorial media. More than in previous centuries, authors of the twelfth and thirteenth centuries explored the generative potential of visual metaphors and literary description in the formation and communication of complex knowledge structures. On the one hand, encyclopedists deployed terms such as image (*imago*) and mirror (*speculum*) in the titles of their written works to suggest a particular relationship between knowledge totalities and visual description.⁹⁰ Through their suggestive titles, works such as Honorius of Autun's *Imago mundi* and Vincent of Beauvais's *Speculum Maius* proposed that visual structures could most effectively account for the ways in which encyclopedias marshal diverse forms of knowledge into conglomerate wholes. Thus, in the preface to *Imago mundi*, Honorius of Autun tells his readers that the book has been “given the name Image of the World because the disposition of the whole world can be seen in it as in a mirror.”⁹¹ On the other hand, twelfth- and thirteenth-century poets foregrounded the heuristic potential of verbally rendered pictorial programs to embody complex systems of knowledge.⁹² For example, in Alan of Lille's *De planctu naturae* and Chrétien de Troyes's *Érec et Énide*, descriptions of the garments worn by individual characters became occasions for the authors to showcase their scholarly erudition.⁹³ The shoes, robes, mantles, and regalia worn by Chrétien's Érec and Alan's personified Nature are outfitted with pictures of the sciences and all the plants and creatures of the world, thereby turning these poetic characters into icons for the microcosm–macrocosm analogy.⁹⁴ Relatedly, didactic poems such as Baudri of Bourgueil's *Adelae*

comitissae and the Italian work known as *L'Intelligenza* feature detailed descriptions of rooms of knowledge in which encyclopedic subject matter is presented ekphrastically as medium-specific works of art.⁹⁵ *L'Intelligenza*, written in Italy during the second half of the thirteenth century, describes Lady Intelligence's palatial residence, which is situated at the center of the world and opulently decorated with erudite frescoes depicting the Wheel of Fortune, classical deities, and world-historical events from biblical times, the Trojan War, the lives of Alexander the Great and Julius Caesar, and Arthurian legend. Baudri's poem, dedicated to Countess Adela of Blois around 1100, describes the countess's bedchamber as a spatial and visual microcosm of the world: The walls are covered with tapestries depicting pagan and biblical stories, the floor is inlaid with a mosaic map of the world, the painted ceiling represents constellations and planets, and the bed features sculpted images of the liberal arts, philosophy, and medicine, as well as a finely woven tapestry depicting the Norman invasion of England by William the Conqueror (who was also Adela's father). Taken together, these texts expanded the classic association between knowledge and cognitive imagery by linking knowledge structures with multimedia pictorial programs that incorporated sculptures, paintings, floor mosaics, tapestries, clothing, and jewelry. Through their innovative use of encyclopedic *ekphrasis*, the medieval poets made a case not only for the epistemic potential of cognitive visualization but also for the imagined physical activity of viewing specific works of art.

THE FRESCO MEDIUM AND EMBODIED SPECTATORSHIP

Whereas readers of *Adelae comitissae* and *L'Intelligenza* were invited to mentally project themselves into verbally constructed rooms of knowledge, visitors to Cardinal Conti's hall at Santi Quattro Coronati could physically enter a space whose walls displayed the world's essential knowledge in the form of a visual panorama. Yet, the encyclopedism of Conti's great hall resided not only in the subject matter of its fresco decorations. To fully understand how the great hall functioned as a large-scale pictorial encyclopedia, we must consider the dynamic interplay between wall paintings, architectural space, and the intellectual engagement and physical movements of its beholders. A central tenet of this book is that the fresco medium was particularly well suited to an iconographic program that thematized encyclopedic comprehensiveness. Unlike oil and tempera painting, where color pigments cling to the surface with the help of adhesive binders, paint pigments applied *al fresco* penetrate the wall itself, rendering the paintings constituent parts of their architectural matrix.⁹⁶ The fresco medium unifies painting with its built environment. Thus, to stand inside a room entirely decorated in fresco is in many ways to stand inside the painting itself. At Santi Quattro Coronati, the medium's environment-forming

capacity, along with the uniform color scheme and stylistic coherence of the paintings, strengthened the message conveyed by the iconographic program. The pictorial program's iconographic orientation around the notion of comprehensive knowledge coordinated with the pictorial medium's ability to generate the effect of being enclosed within an integrated whole.

In the same way that wall paintings shape how spaces are experienced architecturally, architectural space affects how paintings are experienced as three-dimensional images. In many cases, art historical scholarship overlooks the spatial dimension of wall paintings, treating images in fresco as though they were portable pictures hanging on a wall.⁹⁷ The use of photographic reproductions in scholarly publications undoubtedly facilitates such abstractions.⁹⁸ Photographs crop and flatten the world, and so pictures of frescoed spaces often negate mural painting's environment-forming capacity.⁹⁹ Rather than isolating images from their architectural environments, my approach restores the spatial condition of medieval murals by focusing on the ways in which frescoed monuments bring viewers and images into relationships of interdependency. In so doing, I draw on the work of key art historical and archaeological theorists who have attended to the relational, embodied, and spatial conditions of art. In his landmark study *Real Spaces*, David Summers advocated for a definition of art that takes into account the "conditions of human corporality and spatial existence."¹⁰⁰ When we attend to artworks in their real spatial conditions instead of focusing solely on their visual aspects, we come to understand that we interact with art in much the same way that we interact with the world more generally – which is to say, bodily as well as cognitively.¹⁰¹ Archeological theorist Ian Hodder's description of the dialectics of entanglement and codependency in the relationship between human and things also offers a framework for understanding the relationship between spectators and architecturally embedded paintings.¹⁰² Several historians of Byzantine art have productively expanded Otto Demus's foundational thesis about the affective power of mural imagery in order to explore the performative and multisensorial dimensions of medieval church spaces.¹⁰³ Staale Sinding-Larsen, Liz James, and Bissera Pentcheva have shown that the domed interiors of Byzantine churches were activated not only by means of the perspectival treatment and placement of images, but also through the dynamic interplay between spectators, portable objects, and the varied sounds and smells generated by liturgical rites.¹⁰⁴ These interventions have demonstrated the value of approaching medieval spaces as dynamic scenarios that produce referential, symbolic, as well as non-representational forms of meaning through their interactions with human participants.¹⁰⁵

The great hall at Santi Quattro Coronati was designed to elicit broad sensory engagement on the part of its spectators. The highly educated clerics for whom the frescoes were painted were required to move around the space while

taking note of images located in different areas in order to establish meaningful links between them. Through this dynamic process, viewers became aware of their own roles as embodied spectators – that is, of how their combined cognitive and bodily engagement with the densely figured space activated latent levels of meaning. That the Santi Quattro Coronati painters wanted to call attention to the great hall's particular viewing conditions is evident in their treatment of the illusionistic telamones occupying the vault springers. When observed from the floor level, these figures appear to wrap around the acute angles of the masonry groins. The sharp edges formed by the intersection of masonry surfaces seem to push out through the figures, highlighting the intrinsic relationship between painting and architecture in the fresco medium. The telamones' appearance, however, also changes depending on one's viewing position. When seen from one angle, a figure such as the acrobat next to the month of December appears stretched out by the angled masonry groin (Figure 1.33). Yet, when seen from a slightly different angle, the same figure no longer appears subject to its masonry support but rather negates its own architectural fixity. Hanging playfully on the painted red lattice while dangling his left leg into the viewer's space, the figure draws us in and makes us momentarily forget the underlying surface of the wall. Likewise, the acrobat to the right of Emulatio Sancta makes viewers aware of their own bodily movements and physical contortions as they observe the paintings in Cardinal Conti's hall (Figure 1.34). This acrobat strikes an unlikely pose by bending his body so far back that his head is upside down. The acrobat appears to poke fun at viewers observing from the floor level; his strangely warped posture is in many ways an exaggerated version of the pose they are required to assume in order to view the figure on the springer.

The interdependent relationship between viewers, frescoes, and architectural space is central to the great hall's encyclopedic function as well as its capacity to generate knowledge beyond the level of base iconography. While we cannot know precisely how thirteenth-century visitors to Conti's hall would have experienced its encyclopedic mural decorations, we *can* know that these historical individuals occupied human bodies that stood upright, faced the world in one direction at a time, and were endowed with the five senses and a basic appreciation of scale. We can therefore surmise that, like us, historical observers would have experienced the basic tension between the whole and its parts that is a central characteristic of the great hall at Santi Quattro Coronati. In all likelihood, thirteenth-century viewers would have experienced the way in which the walls and vaults create the effect of spatial enclosure, and how the stylistic uniformity and thematic coherence of the frescoes convey a sense of wholeness. Yet, at any given time, these viewers (again, like us) would have been able to focus their vision on only a relatively small part of the mural. In fact, assuming that the basic mechanics of vision have not significantly



1.33. Fresco showing acrobatic figure (telamon), ca. 1244–54, south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

changed since the thirteenth century, everything more than five degrees beyond the point of focus would have been “felt” more than “seen” through what is sometimes called “ambient vision” – which is what enables us to be aware of our surroundings even if we can consciously observe only a small part at any given time.¹⁰⁶ Within a frescoed space such as Conti’s great hall, the vast field sensed by ambient vision is always yet another part of the painting. Beyond vision, other human capacities, such as proprioception and memory, also play into the interpretive experience. As viewers move around within the space, new images continuously come into view while others vanish from their field of vision. All the while, proprioception, ambient vision, and memories of images just seen make it possible for spectators to remain aware of the fresco cycle as a whole even if they can see only one of its parts.

It is precisely this dynamic interplay between architectural space, paintings, and kinesthetic engagement that enabled the Santi Quattro Coronati frescoes



1.34. Fresco showing acrobatic figure (telamon), ca. 1244–54, north bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

to function as a visual encyclopedia. The mural's capacity to thematize the relationship between the whole and its constituent parts was dependent on the presence of human viewers whose real physical limitations prevented them from ever seeing the whole. Furthermore, the fresco cycle's interactive design meant that viewers were consciously aware of how their bodily movements within the space and their intellectual engagement with the paintings activated the monument's encyclopedism. This tension between the seen part of the mural and its unseen, but nevertheless registered, remainder serves as a metaphor for the relationship between partial and complete knowledge. This relationship, which played out at the level of spectatorship, modeled the central tenet in medieval Christian epistemology regarding the contrast between the imperfect knowledge of humans and the perfect knowledge of God.¹⁰⁷ Divine knowledge was all-encompassing and timeless. The divine gaze was like a disembodied eye that apprehended the world in its past,

present, and future at once. By contrast, human knowledge was hampered by its temporal fixity and fleshly embodiment. The human gaze could apprehend only a segment of the wider world from the vantage point of the present moment. At Santi Quattro Coronati, this epistemic distinction was dramatized through the distinct interplay between pictorial decorations, architectural space, and the intellectual activity and physical movements of viewers.

The Santi Quattro Coronati paintings encouraged reflective viewing practices also at the level of individual images. The learned iconographies developed in Conti's great hall did more than translate verbal knowledge into visual form; they also produced intellectual experiences in educated spectators. Examples of images that encouraged reflective viewing include the complex compositions of virtues and vices, which juxtapose allegorical figures and historical characters in unexpected ways. For instance, the composition featuring Sobriety overcoming Luxury on the north wall includes the Old Testament prophet Daniel seated on the virtue's shoulder and the prophet Muhammad alongside the personified vice (Figure 1.35). Here, Luxury exhibits a scroll reading "COMMEDAMVS ET BIBAMVS" (Let us eat and drink), which at face value seems to be a relatively simple reference to indulgent behavior. The appearance of Muhammad next to Luxury can be seen as a reference to the Arabic world imagined as a realm of sensual delights. However, the highly educated viewers for whom the frescoes were painted would likely have recognized the phrase "Let us eat and drink" as a quote from Isaiah's eschatological rumination about Jerusalem's downfall at the hands of the Babylonian king Nebuchadnezzar. They would likely also have seen the contrast drawn between Daniel and Muhammad as an invitation to reflect on the papacy's use of eschatological tropes to cast the prophet of Islam as a precursor to the Antichrist. In fact, the citation from Isaiah 22 was probably meant to invoke Pope Innocent III's 1213 circular announcing the Fifth Crusade, in which the Conti pontiff described Muhammad as the "Son of Perdition" who seduced people "through worldly enticements and carnal delights." As such, the relatively abstruse quotation and the particular pairing of historical characters encouraged spectators to deploy exegetical forms of thinking and to recall knowledge from their memory in order to bring out latent meaning from the fresco.

Other images that encouraged reflective viewing include the ambiguous antiquities placed in the lunettes above the cycle of virtues and vices in the north bay (see Figures 3.29–3.32). These figures are among the only images in the great hall that are not identified by written labels, suggesting that they were designed to function as interpretively ambiguous motifs. Such figures required spectators to engage in open-ended thinking around the figures' possible identities and their relation to the cycle of virtues and vices below. The exploratory mode of engagement reflected the positive view of signification



1.35. Fresco showing Sobriety, Daniel, Luxury, and Mohammad, ca. 1244–54, north wall of north bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

ambiguity in medieval exegesis, wherein all manner of written, visual, and material works were understood as open to multiple interpretations. The paintings also appear to have drawn inspiration from the distinctly speculative interpretations generated by the real antique statues and architectural ruins that could be seen along the streets and in the piazzas of medieval Rome. Related forms of ambiguity appear throughout the cycle of liberal arts in the south bay lunettes, as I detail in [Chapter 2](#). Here, each scene includes a personification of the art in question alongside an ancient progenitor of this art. Whereas the female personifications are easily identifiable by means of inscriptions and attributes, the male progenitors are unidentified. Such unidentified originators were meant to spur reflective viewing and intellectual discussion among the highly educated courtiers for whom the Quattro Coronati murals were painted. Members of the thirteenth-century papal court were more rigorously educated and were significantly more familiar with ancient and Islamic natural

philosophy than their clerical predecessors. It was this rigorous training in the liberal arts and fascination with worldly knowledge that enabled papal courtiers to engage with Cardinal Conti's frescoes in open-minded and exegetical ways.

NOTES

- 1 That the vault in the north bay was originally covered in fresco is confirmed by sections of painted plaster on the lower parts of the architectural groins, which include the legs and drapery belonging to a large human figure. This figure must have hovered above and to the right of the images of the sun and moon on the east wall. Along the same lines, fragmentary frescoes around the principal doorway in the south wall of the south bay, along with the frescoed lamp niche carrying an image of Cain and Abel and two painted window jambs in the north bay, confirm that Conti's fresco scheme originally extended all the way to the floor. We cannot know what kinds of decorations were found on the lower parts of the walls: These may have included scenes from biblical and/or Greco-Roman stories, images related to contemporary politics, or images that celebrated the Conti family. It is also possible that the lower parts of the walls were decorated with simple imitation drapery executed in fresco, which could then be covered with woven tapestries during the colder months of the year. The subject of the lost frescoes in the north vault are equally open to speculation. While a diagrammatic composition would formally complement the cosmic vault in the south bay, an image (or images) related to the apocalypse and the theology of history would connect thematically to the apocalyptically minded church history outlined in the series of virtues and vices on the north bay walls.
- 2 A notable exception is the frescoed crypt of Aquileia Cathedral. On this, see Thomas E. A. Dale, *Relics, Prayer, and Politics in Medieval Venetia: Romanesque Painting in the Crypt of Aquileia Cathedral* (Princeton, NJ: Princeton University Press, 1997).
- 3 Today, the crypt is entered via one of two staircases, constructed in 1572–9 and placed in the side aisles of the upper church. In the thirteenth century, the crypt and the adjacent oratory dedicated to Thomas Becket appear to have been accessible only through a doorway set within the portico on the basilica's west side, facing what is today Piazza Innocenzo III. See Saverio Urciuoli, "La cattedrale di Anagni: osservazioni sulla genesi di un modello basilicale desideriano," in *La cattedrale di Anagni. Materiale per la ricerca, il restauro, la valorizzazione. Bolletino d'Arte volume speciale* (Rome: Istituto Poligrafico e Zecca dello Stato, 2006), 187–225.
- 4 A useful comparison is the so-called crypt of Siena Cathedral, which can be more appropriately described as a "lower church." Rediscovered in the 1990s, the space is decorated with frescoes depicting narratives from the Old and New Testaments. These paintings have been dated to around 1270. See Roberto Guerrini, *Sotto il duomo di Siena: scoperte archeologiche, architettoniche e figurative* (Cinisello Balsamo Milano: Silvana, 2003); Herbert L. Kessler, "Joseph in Siena," in *Joseph of Nazareth through the Centuries*, ed. Joseph F. Chorpennning (Philadelphia: St. Joseph's University Press, 2011), 63–76.
- 5 On the papal residence built for Gregory IX on the foundations of his childhood home, see Anna Maria Voci, "I palazzi papali del Lazio," in *Itineranza pontificia: la mobilità della curia papale nel Lazio (secoli XII–XIII)*, ed. Sandro Carocci (Rome: Istituto Storico Italiano per il Medio Evo, 2003), 211–49, especially 217–20; Pierre-Yves Le Pogam, *De la "Cité de Dieu" au "Palais du Pape": les résidences pontificales dans la seconde moitié du XIII siècle, 1254–1304* (Rome: École Française de Rome, 2005), 171–202.
- 6 Toesca, "Gli affreschi della cattedrale di Anagni."
- 7 For example, this was noted by Gertrud Bing, who visited the Anagni crypt with Aby Warburg in 1929. In her diary from their visit, Bing writes: "In the crypt are dramatic, passion-propelled frescoes whose schematic iconographical-typological organization leads one to suspect an underlying worldview that is both strictly unitary and hierarchical." (*In der Krypta leidenschaftsbewegte dramatische Fresken, deren schematische ikonographisch-typologischer*

- Zusammenhang unter sich ein strenges einheitliches und hierarchisches Weltbild im Hintergrund ahnen lässt.*) Quoted in Karen Michels, ed., *Aby Warburg: Mit Bing in Rom, Neapel, Capri und Italien* (Hamburg: Corso, 2010), 133. Similarly, Alessandro Tomei noted: “The extreme complexity of the cycle, its particular conceptual articulation . . . must indeed stem from an intellectual effort of considerable finesse, and from a desire to convey precise meanings . . . the interpretive key of which, however, is not at all clear to us.” (*L'estrema complessità del ciclo, la sua particolare articolazione concettuale . . . dovettero infatti scaturire da un lavoro intellettuale di rilevante finessa e dalla volontà di comunicare significati . . . ben precisi, il cui codice di interpretazione presenta per noi non poche oscurità.*) Tomei, “Gli affreschi: una lettura,” 41–2.
- 8 I owe this insight to Kristin B. Aavitsland, who expertly interprets the Vita Humana frescoes at the abbey of Tre Fontane as a “visual florilegium.” See Kristin Blikrud Aavitsland, *Imagining the Human Condition in Medieval Rome: The Cistercian Fresco Cycle at Abbazia delle Tre Fontane* (Farnham and Burlington, VT: Ashgate, 2012), 60–4, 295–302.
 - 9 Mary J. Carruthers, *The Book of Memory: A Study of Memory in Medieval Culture*, 2nd ed. (Cambridge and New York: Cambridge University Press, 2008), 229–30; Franklin-Brown, *Reading the World*, 215–20.
 - 10 On the left codex: “MUNDI PRESENTIS SERIES MANET EX ELEMENTIS”; on the right codex: “EX HIS FORMANTVR QVAE SVNT QVAECU(M)Q(UE) CHREANTVR.” My translation is based on the Italian translation by Cappelletti in *Gli affreschi della cripta anagnina*, 63.
 - 11 Cappelletti, *Gli affreschi della cripta anagnina*, 208–28.
 - 12 For the Magnus narratives, see Martina Bagnoli, “A Pilgrim’s Prayer for Salvation: The Miracles of Saint Magnus in the Crypt of Anagni Cathedral,” in *Shaping Sacred Space and Institutional Identity in Romanesque Mural Painting. Essays in Honour of Otto Demus*, ed. Thomas E. A. Dale (London: Pindar Press, 2004), 69–94; Cappelletti, *Gli affreschi della cripta anagnina*, 200–7.
 - 13 Smith, “Anagni,” 1–47.
 - 14 In *La pittura medievale a Roma*, Serena Romano debunks the previously held belief of an artistic “void” during the central decades of the Duecento and argues that the newly discovered frescoes in Santi Quattro Coronati demonstrate the need to rethink the state of Roman painting in the period. Romano, “I cantieri di Roma,” 13–49.
 - 15 Serena Romano, “Nuovi affreschi nella residenza di San Clemente a Roma: gli anni dei ‘quattro cardinali,’” in *Domus et splendida palatia: Residenze papali e cardinalizie fra XII e XV secolo*, ed. Alessio Monciatti (Pisa: Edizioni della Normale, 2004), 59–76.
 - 16 Romano, “Nuovi affreschi nella residenza di San Clemente a Roma,” 59–76.
 - 17 Serena Romano, “Le decorazioni affrescate della residenza di San Clemente,” in *La pittura medievale a Roma. Volume 5*, 216–19.
 - 18 Eva R. Hoffman, “Pathways of Portability: Islamic and Christian Interchange from the Tenth to the Twelfth Century,” *Art History* 24:1 (2001): 17–50.
 - 19 Agostino Paravicini Bagliani, “Federico II e la Curia romana: rapporti culturali e scientifici,” in *Federico II e le scienze*, eds. Pierre Toubert and Agostino Paravicini Bagliani (Palermo: Sellerio, 1994), 439–58; also Roshdi Rashed, “Fibonacci e la matematica araba,” in *Federico II e le scienze*, eds. Toubert and Paravicini Bagliani, 324–37.
 - 20 Romano, “Geografia del potere nella Roma del Duecento,” 632–3.
 - 21 Irene Quadri, “Il ciclo dei mesi e le raffigurazioni allegoriche nella torre abbaziale di San Saba,” in *La pittura medievale a Roma. Volume 5*, 245–8.
 - 22 Paravicini Bagliani, “Federico II e la Curia romana”; Williams, *The Secret of Secrets*, 109–41.
 - 23 Silvia Maddalo, “Rappresentare il tempo a Roma nel Duecento: i calendari dipinti tra tradizione laica e riproposta cristiana,” in *Medioevo: la Chiesa e il Palazzo*, ed. Arturo Carlo Quintavalle (Milan: Electa, 2007), 583–97.
 - 24 Draghi, “Il calendario nella sala antistante,” 180–90.
 - 25 Quadri, “Il ciclo dei mesi e le raffigurazioni allegoriche nella torre abbaziale di San Saba,” 245–8.

- 26 Quadri, “I frammenti dei Lavori dei Mesi (?) nel Palazzo Senatorio,” in *La pittura medievale a Roma. Volume 5*, 242–4.
- 27 Other fresco fragments in the medieval Palazzo Senatorio are those of the so-called Aula Consiliare, dated by Serena Romano to ca. 1278–9. These remains show an extensive vine tendril, the municipal symbol SPQR, and the coat of arms of the Orsini family. See Serena Romano, “Gli affreschi dell’Aula Consiliare del Palazzo Senatorio,” in *La pittura medievale a Roma. Volume 5*, 312–16.
- 28 Irene Quadri, “Il perduto calendario di Santa Maria de Aventino,” in *La pittura medievale a Roma. Volume 5*, 238–41.
- 29 The drawings are now preserved in the Royal Library at Windsor Castle as Windsor RL 9217 and Windsor RL 9219. For the drawings, see Amanda Claridge and John Osborne, *The Paper Museum of Cassiano dal Pozzo: Early Christian and Medieval Antiquities. Volume 1: Mosaics and Wallpaintings in Roman Churches* (London: Harvey Miller, 1996), 61, 73–6; Quadri, “Il perduto calendario di Santa Maria de Aventino,” 238–41; Annibale Ilari, “Il calendario murale di Santa Maria ‘de Aventino.’ Preliminari di ricerca,” in *Piranesi e l’Aventino*, ed. Barbara Jatta (Milan: Electa, 1998), 27–48.
- 30 See discussion in [Chapter 3](#).
- 31 Maddalo, “Rappresentare il tempo a Roma nel Duecento,” 583–97.
- 32 Irene Quadri, “Il perduto *Calendario* nel portico dell’Ala dei monaci,” *La pittura medievale a Roma. Volume 6*, 101–2.
- 33 Maddalo, “Rappresentare il tempo a Roma,” 587–8.
- 34 The most important studies of the *Vita Humana* frescoes are Carlo Bertelli, “L’Enciclopedia delle Tre Fontane,” *Paragone* 20:235 (1969): 24–49; Melinda Mihályi, “I cisterciensi a Roma e la decorazione pittorica dell’Abbazia delle Tre Fontane,” *Arte Medievale* 5 (1991): 158–89; Kristin B. Aavitsland, *Imagining the Human Condition in Medieval Rome: The Cistercian Fresco Cycle at Abbazia delle Tre Fontane* (Farnham: Ashgate, 2012); Irene Quadri, “Il ciclo della *Vita Humana*,” in *La pittura medievale a Roma. Volume 6*, 94–101.
- 35 Aavitsland, *Imagining the Human Condition*, 295–301.
- 36 *Ibid.*, 79–100.
- 37 *Ibid.*, 197–246.
- 38 As illustrated in [Figure 1.23](#), Conti’s cardinalate residence incorporated the north aisle and courtyard of the fourth-century basilica of Santi Quattro Coronati; it also included an assemblage of new structures attached to the north flank of the original basilica. The fourth-century church was destroyed in a fire 1084; the basilica was subsequently restored under Paschal II (1099–1118) as a significantly smaller church confined within about half of the former nave. For the architectural history of the complex, see Lia Barelli, “Il palazzo cardinalizio dei SS. Quattro Coronati a Roma nel Basso Medioevo,” in *Il Lazio tra antichità e medioevo: studi in memoria di Jean Coste*, eds. Zaccaria Mari, Maria Teresa Petrara, and Maria Sperandio (Rome: Quasar, 1999), 111–24; Giuseppina Filippi Moretti, “Le vicende costruttive dell’Aula gotica nel complesso dei Santi Quattro Coronati,” in Draghi, *Gli affreschi*, 391–405.
- 39 For the inscription, see Lia Barelli, *The Monumental Complex of Santi Quattro Coronati in Rome*, trans. Christopher McDowall (Rome: Viella, 2009), 73.
- 40 For the Conti family, see Mark Dykmans, “D’Innocent III à Boniface VIII. Histoire des Conti et des Annibaldi,” *Bulletin de l’Institut Historique Belge de Rome* 45 (1975): 19–208; Paschal Montaubin, “Bastard Nepotism: Niccolò di Anagni, a Nephew of Pope Gregory IX, and Camerarius of Pope Alexander IV,” in *Pope, Church, and City: Essays in Honor of Brenda M. Bolton*, eds. Frances Andrews, Christoph Egger, and Constance M. Rousseau (Leiden: Brill, 2004), 129–76. For Stefano, particularly, see Maleczek, “Stefano Conti.”
- 41 Mark Dykmans, “Riccardo Conti,” in *Dizionario biografico degli italiani* (Rome: Istituto della Enciclopedia Italiana, 1983), 28:466–8. On the Tor’ de Conti, which according to Matthew Paris was condemned by the Roman populace as a symbol of excessive pride,

- see Daniela Esposito, "Insediamenti baronali e complessi familiari nel medioevo a Roma: Torre dei Conti," *Ricerche di Storia dell'Arte* 108 (2012): 48–60; Suzanne Lewis, *The Art of Matthew Paris in the Chronica majora* (Berkeley: University of California Press, 1987), 124–5.
- 42 Other cardinals enjoyed similar privileges, including Raniero Capocci, who was titular cardinal of Santa Maria in Cosmedin, yet was able to boost his income by collecting rent from his residential titulus at San Clemente. Capocci may have sponsored the worldly frescoes in San Clemente's residential quarters. Likewise, Riccardo Annibaldi lived in the residence at Santi Giovanni e Paolo, and not at San Giovanni in Pescheria, which was his titular church. Other examples include Giacomo Savelli, the future Honorius IV (1285–7), who lived at Santa Sabina but was cardinal deacon of Santa Maria in Cosmedin, and Giacomo Colonna, who was cardinal deacon of Santa Maria in Via Lata, but lived first at Santa Maria Maggiore and later at San Lorenzo in Lucina. See Romano, "Nuovi affreschi," 59–76; Le Pogam, *De la "Cité de Dieu" au "Palais du Pape."*
- 43 As Ronald Herzman and William Stephany point out, "The residence at Santi Quattro Coronati seems to have been particularly prized and was granted only to cardinals perceived as being themselves either *papabili* (likely candidates for the papacy) or of great importance to the curia." Ronald B. Herzman and William A. Stephany, "Dante and the Frescoes at Santi Quattro Coronati," *Speculum* 87:1 (2012): 95–146, 118–19.
- 44 Draghi, *Gli affreschi*, 21. Herzman and Stephany note that Benedetto Caetani lived in Conti's former residence until becoming pope, and "then, in the first year of his papacy, Boniface named his nephew Francesco to be cardinal deacon of Santa Maria in Cosmedin, with the concession to live at Santi Quattro Coronati, where Francesco is documented as residing from 1297 until his death in 1304." Herzman and Stephany, "Dante and the Frescoes at Santi Quattro Coronati," 119.
- 45 On the so-called pamphlet wars between the imperial and papal courts, see Friedrich Graefe, *Die publizistik in der letzten epoche kaiser Friedrichs II. Ein beitrag zur geschichte der jahre 1239–1250* (Heidelberg: C. Winter, 1909); Bernard McGinn, *Visions of the End: Apocalyptic Traditions in the Middle Ages* (New York: Columbia University Press, 1979), 168–79; Peter Herde, "Literary Activities of the Imperial and Papal Chanceries during the Struggle between Frederick II and the Papacy," in *Intellectual Life at the Court of Frederick II Hohenstaufen*, ed. William Tronzo (New Haven, CT: Yale University Press, 1994), 227–39.
- 46 Steven J. Williams, "The Early Circulation of the Pseudo-Aristotelian *Secret of Secrets* in the West: The Papal and Imperial Courts," in *Le scienze alla corte di Federico II. Scienze at the Court of Frederick II*, eds. Michael McVaugh and Véronique Pasche (Turnhout: Brepols, 1994), 127–44.
- 47 The starting point for Agostino Paravicini Bagliani's massive scholarly output on the thirteenth-century papal court's engagement with worldly knowledge is *Medicina e scienze della natura alla corte dei papi nel duecento* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1991).
- 48 Important studies of the paintings in the Sylvester Chapel include John Mitchell, "St. Silvester and Constantine at the SS. Quattro Coronati," in *Federico II e l'arte del duecento italiano*, ed. Angiola Maria Romanini (Galatina: Congedo, 1980), 2:15–32; Andreas Sohn, "Bilder als Zeichen der Herrschaft: die Silvesterkapelle in SS. Quattro Coronati (Rom)," *Archivum Historiae Pontificiae* 35 (1997): 7–47; Thomas Noll, *Die Silvester-Kapelle in SS. Quattro Coronati in Rom: ein Bildzyklus im Kampf zwischen Kaiser und Papst* (Munich: Deutscher Kunstverlag, 2011); Draghi, "La decorazione della cappella di San Silvestro"; Wolfgang Christian Schneider, "Bild und Text in der Silvesterkapelle des päpstlichen Herrschaftsbaus von SS. Quattro Coronati in Rom," in *Sacred Scripture / Sacred Space: The Interlacing of Real Places and Conceptual Spaces in Medieval Art and Architecture*, ed. Tobias Frese (Berlin and Boston, MA: Walter de Gruyter, 2019), 287–322.
- 49 Romano, "Nuovi affreschi." For ten years these four cardinals ruled the city of Rome and the papal state. In addition to Conti they were: Raniero Capocci, who served as *vicarius papae*; Riccardo Annibaldi, who was in charge of the papal territories to the south of

- Rome; and Rinaldo dei Conti di Segni, bishop of Ostia and the future Pope Alexander IV (r. 1254–61), who was charged with overseeing the work of the other three cardinals. Rinaldo, a relative of Stefano, is recorded as having consecrated the Sylvester Chapel at Santi Quattro Coronati on the Friday before Palm Sunday in 1246.
- 50 Maleczek, “Stefano Conti,” 475–8.
- 51 Mitchell, “St. Silvester,” 15–32.
- 52 For an incisive analysis of these pictorial narrative strategies, see Herzman and Stephany, “Dante and the Frescoes at Santi Quattro Coronati,” esp. 99–113.
- 53 The *officium stratoris* referenced a ritual characteristic of the High Middle Ages rather than one that would have been conducted in the fourth century, thereby retrojecting the old narrative back into a contemporary – i.e., thirteenth-century – setting. See Mitchell, “St. Silvester,” 25–9.
- 54 For the papacy’s use of the donation against Frederick II, see Mitchell, “St. Silvester,” 20–1. For the complicated history of the document, see Caroline Goodson and Janet L. Nelson, “Review Article: The Roman Contexts of the ‘Donation of Constantine’,” *Early Medieval Europe* 18:4 (2010): 446–67.
- 55 Graefe, *Die publizistik*; McGinn, *Visions of the End*, 168–79; Herde, “Literary Activities.”
- 56 Karl Hampe, “Eine Schilderung des Sommeraufenthaltes der römischen Kurie unter Innocenz III in Subiaco 1202,” *Historische Vierteljahrschrift* 8 (1905): 509–35; Michele Maccarone, “Innocenzo III teologo dell’ Eucharistia,” in *Studi su Innocenzo III*, Italia Sacra: Studi e documenti di storia ecclesiastica 17 (Padua: Antenore, 1972), 340–431, 380 n. 2.
- 57 McGinn, *Visions of the End*, 175.
- 58 *Ibid.*, 175.
- 59 Hugenholtz, “Anagni Frescoes: A Manifesto,” 139–72.
- 60 Hugenholtz, “Anagni Frescoes: A Manifesto,” 160–1.
- 61 Boskovits, “Gli affreschi,” 22–3.
- 62 Agostino Paravicini Bagliani, *The Pope’s Body*, trans. David S. Peterson (Chicago and London: University of Chicago Press, 2000), esp. 5–57, 169–212.
- 63 Paravicini Bagliani, *The Pope’s Body*, 177–8.
- 64 For Damian’s treatise, see [Chapter 5](#), [note 84](#).
- 65 On the papacy’s support of universities and the establishment of a papal “university,” known as the *studium curiae*, in 1245, see Agostino Paravicini Bagliani, *Il trono di Pietro: l’universalità del papato da Alessandro III a Bonifacio VIII* (Rome: NIS, 1996), 205–6; Peter Classen, “Rom und Paris: Kurie und Universität im 12. und 13. Jahrhundert,” in *Studium und Gesellschaft im Mittelalter*, ed. Johannes Fried (Stuttgart: Anton Hiersemann, 1983), 127–69; Brigide Schwarz, *Kurienuniversität und stadtrömische Universität von ca. 1300 bis 1471* (Leiden: Brill, 2012); also, more broadly, Paolo Nardi, “Relations with Authority,” in *A History of the University in Europe. Vol. 1: Universities in the Middle Ages*, ed. Hilde de Ridder-Symoens (New York and Cambridge: Cambridge University Press, 1992), 77–107.
- 66 Williams, *Secret of Secrets*, 115; Classen, “Rom und Paris,” 127–69; Jürgen Miethke, “Die Kirche und die Universitäten im 13. Jahrhundert,” in *Schulen und Studium in sozialen Wandel des hohen und späten Mittelalters*, ed. Johannes Fried (Sigmaringen: J. Thorbecke, 1986), 285–320; Jacques Verger, “Études et culture universitaires du personnel de la Curie avignonnaise,” in *Aux origines de l’État moderne. Le fonctionnement administratif de la papauté d’Avignon. Actes de la table ronde d’Avignon (22–24 janvier 1988)*, Collection de l’École française de Rome 138 (Rome: L’École française de Rome, 1990), 61–78.
- 67 Agostino Paravicini Bagliani, “Federico II e la Curia romana: rapporti culturali e scientifici,” in *Federico II e le scienze*, eds. Pierre Toubert and Agostino Paravicini Bagliani (Palermo: Sellerio, 1994), 439–58; Marshall Baldwin, “The Popes and Learning in the High Middle Ages,” *Manuscripta* 1 (1957): 150–8.
- 68 Bacon dedicated his *Opus maius* to Clement IV (1265–8). For Bacon’s relationship to the papacy, see Amanda Power, *Roger Bacon and the Defence of Christendom* (Cambridge:

- Cambridge University Press, 2013), esp. 40–83. On the term “experimental science” in the work of Roger Bacon, see Jeremiah Hackett, “Roger Bacon on *Scientia Experimentalis*,” in *Roger Bacon and the Sciences*, ed. Jeremiah Hackett (Leiden: Brill, 1997), 277–316.
- 69 Williams, *Secret of Secrets*, 118. Also, according to Amanda Power’s recent analysis (*Roger Bacon and the Defence of Christendom*, 40), Roger Bacon’s “later works were written because he felt compelled to offer his own statement of the power, potential and dangers of institutionalised learning . . . He was in dialogue with ideas long circulating in Paris: hoping to link the individual work of scholars to the agendas of the papal curia and the religious orders; seeking – through the application of learning – the renewal of Christian society and its defence against heretics, *infideles* and Antichrist himself.”
- 70 Michael Scot first visited Rome as part of the entourage of Archbishop Rodrigo of Toledo during the Fourth Lateran Council (1215–17). See Charles Burnett, “Michael Scot and the Transmission of Scientific Culture from Toledo to Bologna via the Court of Frederick II Hohenstaufen,” in *Le scienze alla corte di Federico II*, eds. McVaugh and Pasche, 101–26.
- 71 Honorius II quoted in Williams, *Secret of Secrets*, 116. For the Latin edition, see Petrus Pressutti, ed., *Regesta Honorii papae III* . . . (Rome: Vaticana, 1895), 2:334, no. 5470: “Magistro Michaeli Scotto. Attenta scientia eius litterarum ob quam maioribus debet, ampliari beneficiis, maxime a Sede Apostolica, qua in eruditis viris delectatur.” See also Charles Homer Haskins, “Michael Scot and Frederick II,” *Isis* 4:2 (1921): 250–75, esp. 252–3.
- 72 Haskins, “Michael Scot and Frederick II,” 250–75; Burnett, “Michael Scot and the Transmission of Scientific Culture,” 101–26.
- 73 Steven J. Williams, “The Early Circulation of the Pseudo-Aristotelian *Secret of Secrets* in the West: The Papal and Imperial Courts,” in *Le scienze alla corte di Federico II*, eds. McVaugh and Pasche, 127–44, esp. 128, 142. During this same period, the poet Henry of Avranches enjoyed the patronage of both Gregory IX and Frederick II, as did Roffredo Benevento, a professor of law. Petrus Hispanus, who was himself elected pope as John XXI in 1276, had previously served as court physician to Frederick II in 1247, then later as *medicus papae* to Gregory X (r. 1271–6). Around 1234, Cardinal Raniero Capocci apparently engaged Frederick II in scientific discussions at the imperial court in Sicily together with the mathematician Leonardo Fibonacci, who memorialized the occasion by composing his treatise *Flos super solutionibus* as a dialogue between the cardinal and the emperor.
- 74 Roger Bacon, *De retardatione accidentium senectutis: cum aliis opusculis de rebus medicinalibus*, eds. A. G. Little and E. Withington (Farnborough: Gregg, 1966); Agostino Paravicini Bagliani, “Il mito della ‘prolongatio vitae’ e la corte pontificia del duecento: il ‘de retardatione accidentium senectutis,’” in *Medicina e scienze della natura alla corte dei papi nel duecento* (Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1991), 281–326.
- 75 Williams, *Secret of Secrets*, 60–182. Philip of Tripoli allegedly found the Arabic manuscript in Antioch and brought it back to Rome, where he rendered it into Latin. Philip was not exceptional in his knowledge of Arabic, however; an unnamed cardinal translated the diplomatic correspondence received by Innocent IV from Ayyubid rulers in the years 1245–6. See Benjamin Z. Kedar, “Religion in Catholic–Muslim Correspondence and Treaties,” in *Diplomatics in the Eastern Mediterranean, 1000–1500: Aspects of Cross-Cultural Communication*, eds. Alexander D. Beihammer, Maria G. Parani, and Christopher D. Schabel (Leiden: Brill, 2008), 407–22, esp. 412–13.
- 76 The text was probably written in the tenth century by an unknown Arabic writer and is now considered part of the corpus of pseudo-Aristotelian writings. Yet, as Williams demonstrates (*Secret of Secrets*, 1), the handbook became one of the most widely read books of the late medieval period.
- 77 Williams, *Secret of Secrets*, 10–11.
- 78 Michael Scot’s *Liber physiognomiae* relies on Philip’s translation of the *Secret of Secrets*, while Roger Bacon’s *Opus maius*, *Metaphysica*, and *De secretis operibus naturae* all refer to the text. See Williams, *Secret of Secrets*, 129–34; Richard Foerster, *De Aristotelis Quae Feruntur Secretis Secretorum* (Kiel: Schmidt & Klaunig, 1888), 29–30.

- 79 Binkley, *Premodern Encyclopaedic Texts*; Picone, *L'enciclopedismo medievale*; Bernard Ribémont, *De natura rerum: études sur les encyclopédies médiévales* (Orléans: Paradigme, 1995); Bernard Ribémont, *Les origines des encyclopédies médiévales d'Isidore de Séville aux Carolingiens* (Paris: H. Champion, 2001); Bernard Ribémont, *La "renaissance" du XII^e siècle et l'encyclépédisme* (Paris: H. Champion, 2002); Jason König and Greg Wolf, *Encyclopaedism from Antiquity to the Renaissance* (Cambridge and New York: Cambridge University Press, 2013); Franklin-Brown, *Reading the World*.
- 80 Bernard Ribémont, "Encyclopedias," in *Medieval Science, Technology, and Medicine: An Encyclopedia*, ed. Thomas Glick (London and New York: Routledge, 2005), 159–61.
- 81 While the coinage "encyclopedia" can be traced to Florentine humanists in the late fifteenth century, the term was used relatively sparingly prior to the creation of Denis Diderot's *Encyclopédie* in the 1750s. On the term, see Opitz, "Weltbild – Bildräume – Gedächtnisbilder," 31. Opitz cites Jürgen Henningsen, "Enzyklopädie: Zur Sprach- und Bedeutungsgeschichte eine pädagogischen Begriffs," *Archiv für Begriffsgeschichte* 10 (1966): 271–362.
- 82 Christel Meier, "Organisation of Knowledge and Encyclopaedic Ordo: Functions and Purposes of a Universal Literary Genre," in *Premodern Encyclopaedic Texts*, ed. Binkley, 103–26.
- 83 The literature on this topic is vast. Among the most important studies are Anna C. Esmeijer, *Divina Quaternitas: A Preliminary Study in the Method and Application of Visual Exegesis* (Amsterdam: Van Gorcum Assen, 1978); Michael Evans, "The Geometry of the Mind," *Architectural Association Quarterly* 12:4 (1980): 32–55; Madeline H. Caviness, "Images of Divine Order and the Third Mode of Seeing," *Gesta* 22 (1984): 99–120; Katrin Müller, *Visuelle Weltaneignung: Astronomische und Kosmologische Diagramme in Handschriften des Mittelalters* (Göttingen: Vandenhoeck & Ruprecht, 2008); Marcia Kupfer, Adam S. Cohen, and J. H. Chajes, eds., *The Visualization of Knowledge in Medieval and Early Modern Europe*, Studies in the Visual Cultures of the Middle Ages (SVCMA) (Turnhout: Brepols, 2020); Jeffrey F. Hamburger, David J. Roxburgh, and Linda Safran, *The Diagram as Paradigm: Cross-Cultural Approaches* (Washington, DC: Dumbarton Oaks Research Library and Collection, 2022).
- 84 Danielle Joyner, *Painting the Hortus Deliciarum: Medieval Women, Wisdom, and Time* (University Park: Pennsylvania State University Press, 2016); Karen de Coene, *Liber Floridus: The World in a Book* (Lannoo: Tielt, 2011); Albert Derolez, *The Making and Meaning of the Liber Floridus: A Study of the Original Manuscript Ghent, University Library MS 92* (London: Harvey Miller, 2015).
- 85 Marcia Kupfer, "Reflections in the Ebstorf Map: Cartography, Theology, and *Dilectio Speculationis*," in *Mapping Medieval Geographies: Geographical Encounters in the Latin West and Beyond, 300–1600* (New York: Cambridge University Press, 2014), 100–26; Marcia Kupfer, *Art and Optics in the Hereford World Map* (New Haven, CT: Yale University Press, 2016).
- 86 The latter was made from thirty squares of sheepskin sewn together to form a vast pictorial surface measuring about 12 x 12 feet, whereas the Hereford map was created on a single piece of calfskin and originally formed the central image of a Marian triptych.
- 87 Émile Mâle, *Religious Art in France, the Thirteenth Century: A Study of Medieval Iconography and Its Sources* (Princeton, NJ: Princeton University Press, 1984). In describing French cathedrals as built equivalents of Vincent of Beauvais's *Speculum Maius*, Mâle relied on Adolphe Napoléon Didron, *Iconographie Chrétienne. Histoire de Dieu* (Paris: Imprimerie Royale, 1843). On this relationship, see Alexandra Gajewski, "Emile Mâle's 'L'art religieux du XIII^e siècle en France. Etude sur l'iconographie du moyen âge et sur ses sources d'inspiration', 1898," *Burlington Magazine* 151:1275 (2009): 396–9.
- 88 Conrad Rudolph, "Inventing the Gothic Portal: Suger, Hugh of Saint Victor, and the Construction of a New Public Art at Saint-Denis," *Art History* 33:4 (2010): 568–95.
- 89 Julius von Schlosser, "Giusto's Fresken in Padua und die Vorläufer der Stanza della Segnatura," *Jahrbuch der kunsthistorischen Sammlungen des allerhöchsten Kaiserhauses Wien* 17 (1896): 13–100.

- 90 On the mirror as a metaphor in titles, see Opitz, "Weltbild – Bildräume – Gedächtnisbilder," 31. Opitz cites Herbert Grabes, *The Mutable Glass: Mirror-Imagery in Titles and Texts of the Middle Ages and English Renaissance* (Cambridge: Cambridge University Press, 1982). See also Franklin-Brown, *Reading the World*, 9.
- 91 Nomenque ei Imago Mundi indatur, eo quod totius orbis in eo quasi in speculo conspicitur. On this, see Valerie J. Flint, "Honorius Augustodunensis Imago Mundi," *Archives d'histoire doctrinale et littéraire du Moyen Age* 49 (1982): 7–153; Kupfer, *Art and Optics in the Hereford Map*, 76–8; Franklin-Brown, *Reading the World*, 263–302.
- 92 Opitz, "Weltbild – Bildräume – Gedächtnisbilder," 31–41.
- 93 Alan of Lille, *The Complaint of Nature: Translation and Commentary by James J. Sheridan* (Toronto: Pontifical Institute of Medieval Studies, 1980); Crétien de Troyes, *Erec and Enide*, trans. Burton Raffel (New Haven, CT and London: Yale University Press, 1997).
- 94 Haiko Wandhoff, "Found(ed) in a Picture: Ekphrastic Framing in Ancient, Medieval and Contemporary Literature," in *Framing Borders in Literature and Media*, eds. Werner Wolf and Walter Bernhart (Amsterdam and New York: Rodopi, 2006), 207–27; Donald Maddox, *Structure and Sacring: The Systematic Kingdom in Chrétien's Erec et Enide* (Lexington, KY: French Forum, 1978), 170.
- 95 For Baudri's poem, see Mary Carruthers, *The Craft of Thought: Meditation, Rhetoric, and the Making of Images, 400–1200* (Cambridge and New York: Cambridge University Press, 1998), 213–20; Monika Otter, "Baudri of Bourgueil, 'To Countess Adela,'" *Journal of Medieval Latin* 11 (2001): 60–141; Vincent Debiais, "The Poem of Baudri for Countess Adèle: A Starting Point for a Reading of Medieval Latin Ekphrasis," *Viator* 44:1 (2013): 95–106. For *L'Intelligenza*, see Marco Berisso, ed., *L'Intelligenza: poemetto anonimo del secolo XIII* (Milan: Fondazione Pietro Bembo, 2000); Marcello Ciccuto, *Il restauro de "L'Intelligenza" e altri studi dugenteschi* (Pisa: Giardini, 1985).
- 96 Péter Bokody, "Mural Painting as a Medium: Technique, Representation, and Liturgy," in *Image and Christianity: Visual Media in the Middle Ages*, ed. Péter Bokody (Pannonhalma: Pannonhalmi Főapátság, 2014), 136–53; Roger Ling and Lesley Ling, "Fresco and Other Forms of Wall Painting," in *Making Medieval Art*, ed. Philip Lindley (Donington: Shaun Tyas, 2003), 4–29. Bokody highlights the way in which the ancient writer Vitruvius connected the embedded quality of fresco to the medium's impressive durability: "For the paints do not dissipate when they are carefully applied to moist plaster, but stay perpetually, because the lime, made weak and porous by having had its moisture baked out in the kiln, is forced by its emptiness to absorb anything with which it happens to come in contact." Bokody, "Mural Painting as a Medium," 138. See Vitruvius, *Ten Books on Architecture*, trans. Ingrid D. Rowland (Cambridge: Cambridge University Press, 1999), 89–90.
- 97 Notable exceptions focusing on Renaissance and Ancient art include Sven Sandström, *Levels of Unreality: Studies in Structure and Construction in Italian Mural Painting During the Renaissance* (Uppsala: Almqvist & Wiksell, 1963); Oliver Grau, *Virtual Art: From Illusion to Immersion*, trans. Gloria Custance (Cambridge, MA and London: MIT Press, 2003), esp. 25–37; Nathaniel B. Jones, *Painting, Ethics, and Aesthetics in Rome* (Cambridge: Cambridge University Press, 2019), esp. 137–78. For the spatial characteristics of Byzantine mosaics, see Otto Demus, *Byzantine Mosaic Decoration: Aspects of Monumental Art in Byzantium* (Boston, MA: Boston Book and Art Shop, 1955), esp. 3–39; Armin F. Bergmeier, "Dominanz der Imagination: Die Konstruktion immersiver Räume in der Spätantike," in *Jahrbuch immersiver Medien [2012]: Bildräume: Grenzen und Übergänge* (Marburg: Schüren, 2012), 37–48.
- 98 John R. Clarke made this point regarding photographic reproductions of Ancient Roman floor mosaics: "A word should be said here about the primacy of motor responses in viewing many mosaics over the primarily visual responses in viewing paintings or photographs of mosaics. It is obvious that mosaics are floor decorations functioning in architectural complexes. But photographs of mosaics give us a preframed, scale-less visual package, in which we see the mosaic as a whole, as we would a painting on a wall." John R. Clarke, *Roman Black-and-White Figural Mosaics* (New York: College Art Association, 1979), 20.

- 99 A good example of this effect can be seen in the photograph of the south bay vault, which renders the ribbed ceiling significantly shallower than it is. In reality, the ribs of the vault droop down via the spandrels and into the walls in such a way that viewers experience the ceiling as an architectural canopy that wraps around them in three dimensions.
- 100 David Summers, *Real Spaces: World Art History and the Rise of Western Modernism* (London: Phaidon, 2003), esp. 36–45.
- 101 Summers writes: “Real space is ultimately defined by the human body, more specifically by the body’s finite spatiotemporality, its typical structure, capacities and relations. These are what I shall call conditions of real space . . . The ‘anthropomorphism’ of the conditions and values of real space provides the irreducible basis for the meanings given to the world in which we must find ourselves in any cultural circumstance, and for our self-understanding through that world. It is precisely because we, like any of those who made (and make) places and artifacts with which we are unfamiliar, in the first instance stand, face, grow, move and die, that we may begin to understand social spaces and their associated practices and values as alternative to our own” (Summers, *Real Spaces*, 36–8).
- 102 Hodder argues for a deeper appreciation of the dialectics of entanglement that arise when humans depend on things that, in turn, depend on humans as well as other things. Ian Hodder, *Entangled: An Archaeology of the Relationships between Humans and Things* (Oxford: Wiley-Blackwell, 2012).
- 103 Demus argued that the middle Byzantine decorative system sought to eliminate the distance between represented space and the real space of the church: “In Byzantium the beholder was not kept at a distance from the image; he entered within its aura of sanctity, and the image, in turn, partook of the space in which he moved. He was not so much a ‘beholder’ as a ‘participant’.” See Demus, *Byzantine Mosaic Decoration*, 4. See also Thomas E. A. Dale, “From ‘Icons in Space’ to Space in Icons: Pictorial Models for Public and Private Ritual in the Thirteenth-Century Mosaics of San Marco in Venice,” in *Hierotopy: Comparative Studies of Sacred Spaces*, ed. Alexei Lidov (Moscow: Indrik, 2009), 139–52; Ian Verstegen, “Otto Demus, Byzantine Art and the Spatial Icon,” *Journal of Art Historiography* 19 (2018): 1–24.
- 104 Staal Sinding-Larsen, *The Burden of the Ceremony Master: Image and Action in San Marco, Venice, and in an Islamic Mosque* (Rome: Norwegian Institute in Rome, 2000), 57–104, 191–205; Liz James, *Light and Colour in Byzantine Art* (London: Clarendon Press, 1996); Liz James, “Senses and Sensibility in Byzantium,” *Art History* 27:4 (2004): 522–37; Bissera Pentcheva, *Hagia Sophia: Sound, Space, and Spirit in Byzantium* (University Park: Penn State University Press, 2017).
- 105 A recent collection of studies on the relationships between art, architecture, and mobile beholders is Gillian B. Elliott and Anne Heath, eds., *Art, Architecture, and the Moving Viewer, ca. 300–1500 CE* (Leiden: Brill, 2022).
- 106 Kevin K. Rooney, Robert J. Condia, and Lester C. Loschky, “Focal and Ambient Processing of Built Environments: Intellectual and Atmospheric Experiences of Architecture,” *Frontiers in Psychology* 8 (2017), www.frontiersin.org/articles/10.3389/fpsyg.2017.00326/full.
- 107 On this, see the discussion in [Chapter 5](#).

TWO

ART, LEARNING, AND REFLECTIVE VIEWING

The Liberal Arts at Santi Quattro Coronati

VISITORS TO CARDINAL CONTI'S GREAT HALL WOULD ENTER THROUGH THE principal doorway in the south bay and find themselves greeted by the figure of King Solomon, who stands, flanked by two small windows, at the center of the north wall (see [Figure 1.1](#)). Dressed in the manner of an ancient emperor and accompanied by an army of triumphant virtues, Solomon stands as a symbol of justice and wise rulership. It is possible that Stefano Conti's throne was placed directly beneath the biblical ruler.¹ If so, the cardinal would have sat as a self-fashioned heir to Solomon's wisdom and jurisprudence, and as a viewer of his newly commissioned fresco cycle. From his position at the north end of the hall, Conti would look toward the south bay, whose pictorial decorations are conceived as a model of the cosmos. The south bay vault, under which his visitors would be standing, features a vast celestial diagram with the twelve signs of the zodiac and other mythologically significant constellations from the northern hemisphere. In the spandrels of the vault are personifications of the four seasons depicted as men of increasing age, each surrounded by the winds rendered as winged heads with puffed cheeks. The four seasons serve to connect the vault fresco – both physically and thematically – to the calendar cycle on the walls below. The calendar represents the twelve months as scenes of agricultural activity: grain threshing, seed sowing, grape treading, livestock butchering, and so forth. Situated between these images of cosmic temporality, in the three lunettes, are representations of

five liberal arts: grammar, geometry, music, arithmetic, and astronomy. This sequence of liberal disciplines, the only such surviving cycle in medieval Roman art, visualizes the educational curriculum through a combination of personifications, historical figures, inscriptions, and technological instruments (see [Figures 1.2–1.4](#)). Seen in relation to the surrounding imagery, the liberal arts cycle situates the intellectual pursuits of the nobility in contrast with the manual labor performed by the peasantry in the agricultural calendar. The *artes liberales* also establish an important thematic link to the frescoes in the north bay. The clerestory level in the north bay features a remarkably complex cycle of virtues and vices that combines allegorical figures with historical characters. The historical characters in the virtues cycle – a diverse selection of saints and sinners drawn from ecclesiastical history – serve as *exempla* of the virtuous and vicious qualities with which they are paired. Similarly, each image in the arts sequence features a historical character that was meant to be understood as the ancient progenitor of the discipline in question. Finally, in their emphasis on intellectual heritage from antiquity, the scientific progenitors in the arts cycle also complement the images in the north bay lunettes, where representations of Roman antiquities foreground the material and iconographic inheritance from the ancient world.

This chapter examines the liberal arts cycle in Conti's great hall in light of the newfound appreciation for education and worldly knowledge at the thirteenth-century papal court. While the arts sequence at Santi Quattro Coronati builds on established iconographic traditions, it also exhibits a series of innovative features that were aimed at spurring reflective viewing. In scenes such as the representations of geometry, arithmetic, and music, particular emphasis is placed on the discursive transmission of knowledge and the development of purposeful ambiguity. The unidentified progenitors featured in each scene invited viewers to speculate about their possible identities by drawing on their own rigorous training in the liberal arts. As such, the images of the liberal arts not only showcased the educational formation of Cardinal Conti and his courtly colleagues; they also depicted the very training that positioned these courtly viewers to engage with the Santi Quattro Coronati frescoes in an open-ended, exegetical manner. The chapter closes with a case study of the representation of music on the south wall, which is seen in relation to the differentiation and interconnectedness of theoretical music (*musica theórica*) and performed music (*musica practica*). Conti's great hall united these two aspects of music by positioning the image of *Musica* above two acoustic tubes that could convey real musical harmonies from the Sylvester Chapel one floor below. These medieval "loudspeakers" turned the great hall into a multisensory space for contemplation of the theoretical status of the sciences versus their potential for practical implementation in courtly life.

DESCRIPTION OF THE LIBERAL ARTS CYCLE

The curriculum is organized in accordance with the sequence of the labors of the months, with the most basic science of grammar positioned directly above the month of January on the west wall (Figure 2.1). There, a male philosopher in a toga sits on a jewel-encrusted box and points with two fingers toward a book on a lectern. The open pages of his codex display grammar's essential components: the letters of the alphabet in Roman capitals.² The aged philosopher, who should probably be understood as a personification of grammar, gazes toward a sumptuously dressed woman on a richly decorated throne. Damage to the west wall plaster has severely fragmented this personification. It is possible, though far from certain, that she was intended as an image of logic, the concept under which rhetoric (the art of eloquent speech) and dialectic (the art of distinguishing truth from falsehood) were sometimes subsumed.³ If so, the unification of two arts in one figure would have enabled the entire “trivium” of verbal arts to be fitted into one half of the west wall lunette. In the other half, a woman paces to the left as she conducts measurements with a large compass (Figure 2.2). Identified by an inscription as “[GEOME]TR[I]A” (Geometry), she unfurls a parchment scroll relating that geometry, the science of measurement, starts with a single point.⁴ To the woman's left sits an unidentified bearded philosopher who links the art of geometry to the perceived authority of ancient knowledge. The philosopher



2.1. Fresco showing personification of Grammar, ca. 1244–54, great hall, west wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



2.2. Fresco showing personification of Geometry with unnamed scientific representative, ca. 1244–54, great hall, west wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

leans in, extending an arm as if to offer some insight into the scientific principles of geometry. His message can perhaps be gleaned from the fragmented scroll draped across his lap, indicating that geometry concerns itself with determining spatial dimensions.⁵

Music appears next in the sequence (Figure 2.3). Positioned above May and June on the south wall, a woman identified as “MVSICA” (Music) peals a chime to indicate the correct tone for the attendant schoolboy who is playing with gusto on a marvelously rendered seven-pipe organ.⁶ To the far right, another student, or perhaps a servant, pumps air into the back of the instrument with a bellows. To the far left, a fragmented figure exhibits a scroll and plays a stringed instrument that appears to be a lyre, or the guitar-like fiddle known as a *citole*.⁷ As is the case in the image of geometry, the figure should likely be identified as an ancient authority on music rendered in the manner of a male philosopher.

A large lacuna created by a window inserted in the seventeenth century has mostly obliterated the representation of arithmetic on the left-hand side of the south lunette (Figure 2.4). In the small triangle that survives, a schoolchild sitting on a low stool turns toward his enthroned teacher in rapt attention.⁸ The fragment captures a moment of studious learning. The painter has twisted the student’s upper body to portray his face in dramatic profile. On the right, the teacher raises an index finger to indicate the number one; correspondingly, the student tucks his left little finger down to count the same number.⁹ This



2.3. Fresco showing personification of Music with unnamed scientific representative, ca. 1244–54, great hall, south wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



2.4. Fresco showing representation of Arithmetic, ca. 1244–54, great hall, south wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



2.5. Fresco showing representation of Astronomy, ca. 1244–54, great hall, east wall of south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

simple yet carefully devised counting gesture brilliantly visualizes the transmission of knowledge from master to pupil.

The art of astronomy has the east wall lunette to itself. Dressed in a white tunic and red cloak, Astronomy strides leftward with a scroll declaring astronomy the science of the planets and the stars (Figure 2.5).¹⁰ At her feet, an eager schoolboy appears to be receiving an object from the poorly preserved figure enthroned on the left-hand side of the pictorial field, presumably an ancient authority on the science of the stars. The no longer visible object may well have been a book or an astronomical instrument such as an astrolabe or celestial globe. Whatever it was, it would have been positioned at the very center of the lunette.

Considered the most advanced of the sciences, astronomy situates itself as the culminating point of the arts cycle, where it leads the eye up toward the cosmic vault as if to evoke the numerical correspondence between the seven liberal arts and the seven planets (Figure 2.6).¹¹ In the context of the south bay, astronomy's privileged position tightened the thematic integration of the liberal arts cycle with the surrounding imagery's focus on concepts of temporality and cosmology. Lodged between the disk-shaped astrological diagram and the labors of the months, the *artes* unfold cyclically as a finite system of sciences, thus evoking in visual and spatial terms what Martianus Capella referred to as a *disciplinae cyclicae*.¹² The calendar's sequentiality moreover affords a sense of temporal duration to the cycle of arts in the lunettes: grammar, the most elemental of the sciences and the first stage of the educational curriculum, sits above the month of January; while astronomy appears in the lunette above the final months of the calendar year. These time-centered links establish connections between the *artes liberales* as a conceptual entity and the idea of learning as marked by time. Education and erudition



2.6. Frescoed vault above south bay showing celestial waters with zodiacal signs and other constellations; personifications of the seasons in spandrels, ca. 1244–54, great hall, south bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

were often understood in relation to the human life cycle: Youth and adolescence were figured as the time for internalizing the basics of reading, writing, and calculating, whereas old age served as a visual and textual attribute of wisdom. By the same token, ancient knowledge was widely understood as the most reliable source of learning. Depending on your source, worldly knowledge had its origins either in Greek antiquity or in Old Testament times. Students and scholars of the thirteenth century accordingly understood their own scientific discourse as rooted in one of these bygone eras whose perceived authority was coextensive with their pastness.

THE PAPAL COURT AND EDUCATION

Cardinal Conti's arts cycle is best understood in relation to the changing status of education at the thirteenth-century Curia. Successive popes from Innocent III (1198–1216) onward aimed to raise the intellectual standards of their courts and to expand the administrative capacity of the church. More than in previous centuries, higher education became a criterion for climbing the ecclesiastical hierarchy, and popes increasingly favored candidates with master's degrees for promotion to the college of cardinals.¹³ By midcentury, the papal Curia had

been transformed into a rigorously educated circle.¹⁴ Around eighty percent of cardinals created by Gregory IX, who had himself studied in Paris and Bologna, bore the title of *magister*.¹⁵ Gregory's successor, Innocent IV (1243–54), continued the trend: Out of the twelve cardinals that he named in his first round of elevations, three were professors of theology in Paris and another six held degrees from either Bologna, Paris, or Toledo.¹⁶ That they were themselves products of Europe's nascent universities goes some way in explaining the broad and consistent support showed by thirteenth-century popes and cardinals toward educational institutions. Medieval universities engendered vibrant urban cultures where students appear to have socialized day and night, much to the chagrin of local clerics and merchants.¹⁷ Universities were also places where young minds were exposed to new and sometimes unorthodox lines of thinking by way of the recently translated works of Aristotle and other ancient sages. It is therefore not surprising that many members of the clerical elite appear to have looked back on their student years as periods of happiness. In his writings, Innocent III recalled with fondness the years he spent in pursuit of learning at Paris; and, as pope, he would go on to show unwavering support for the university and its efforts to institutionalize the newly available philosophy of Aristotle.¹⁸ Similarly, the letters of Gregory IX and several of his pontifical successors spoke of Paris in idealized terms as a new Jerusalem, a blissful city on a hill from which learning flowed like the rivers of paradise.¹⁹

Yet, the papacy's supportive attitude toward the university movement cannot be explained solely by personal affection or high-minded love of knowledge for knowledge's sake. Practical and political concerns were also at work. By granting benefices and extending other forms of economic support to students and teachers, the papacy was effectively placing these recipients in debt to the church. Moreover, with the church's bureaucratic structure growing in scale and complexity, the papacy was in great need of individuals who were not only skilled writers but could also navigate the complexities of civil and canon law.²⁰ In addition to managing church business on a day-to-day basis, such educated individuals could be mobilized as political instruments in a broad effort to promote church policy and expand the papacy's influence and power. By staffing its sprawling ecclesiastical offices with university graduates, the church could mount a unified response to the variety of beliefs and ideas propagated by newly emergent religious movements, or by individual scholars whose thinking was perceived to have strayed too far beyond the confines of orthodoxy. At one point, the papacy even created a new university in response to unorthodox thinking. The University of Toulouse, instituted by papal bull in 1229, was imposed on the southern French county as a form of punishment for the region's Catharist leanings and to serve as a "bulwark against heresy."²¹

There is little doubt that popes and members of their courts were broadly in favor of the “new” forms of Greek and Arabic knowledge that were becoming increasingly available through Latin translations. The translation movements of twelfth- and thirteenth-century Spain and southern Italy significantly broadened the corpus of ancient scientific writings; and these new texts in turn had a revisionary impact on the arts curricula of late medieval universities. As we have seen, the papal court, during the central decades of the thirteenth century, was itself becoming an important center for the translation and dissemination of previously unavailable writings. The papacy’s cultivation of temporal knowledge was largely driven by a self-interested desire to compete with the courts of secular rulers, and an interest in putting new medical, astrological, and legal knowledge to practical use in the pursuit of increased political power. Yet, courtly members also recognized the potential for newly available learning to reform theology in ways that would make it better equipped to meet a historical moment of broad epistemic change.²² Those popes, cardinals, and courtiers who had attended university in the late twelfth and early thirteenth centuries would have been among the first to experience the revisionary potential of Aristotle’s broad philosophical framework, which, over the course of the century, would become harmoniously fused with revelational doctrine through the work of Thomas Aquinas and others.

The impact of Aristotelian learning on thirteenth-century theology ran in close parallel to its impact on the liberal arts curriculum. One by one, Europe’s educational institutions retooled their curricula to match the new theoretical framework offered by Aristotle’s philosophy.²³ The papacy was again broadly in favor of these developments. Against frequent opposition to Aristotle’s works, particularly in Paris, popes worked to preserve the role of natural philosophy in the curriculum. Likewise, when conservative clerics called to prohibit the entire Aristotelian corpus in educational contexts, pontiffs typically responded by outlining provisions for *how* the philosopher’s works should be read by students. Thus, when Innocent III consented to a ban on the study of the *Libri naturales* at the University of Paris in 1215, he insisted that Aristotle’s works of logic be read, and that the works on ethics remain optional.²⁴ Gregory IX walked a similarly fine line of promoting Aristotelian learning while retaining the loyalty of those who sought to outlaw the philosopher’s writings.²⁵ When the pope established a committee to examine and purge the controversial *Libri naturales* of errors, his express aim was to enable these books to be “studied without hesitation” and to avoid having “the useful be vitiated by the useless.”²⁶ In similar fashion, the new university Gregory had created at Toulouse was advertised as a place where “those who wish to scrutinize the bosom of nature to the inmost can hear the books of Aristotle which were forbidden at Paris.”²⁷

Although hard evidence for Stefano Conti's educational background is scant, the earliest written records to mention his name appear to place him in France in his teenage years, suggesting that he might have studied in Paris, as had become customary for the *nobilitas romana* by the early thirteenth century.²⁸ As a member of the Conti family, and destined for a career in the cloth, it is possible that Stefano's education proceeded along a similar path to that established by his two papal uncles, Innocent III and Gregory IX. They had both started their university studies at Paris before moving on to earn degrees in law at the University of Bologna.²⁹ Although we cannot say with certainty that Stefano studied law, his curial career, which in large part consisted in serving as papal auditor, suggests that he was proficient in the complexities of civil and canon law. As Andreina Draghi has shown, all three popes under whom Stefano served entrusted him with judicial and diplomatic assignments: He was tasked with settling legal disputes within bishoprics at home and abroad, with adjudicating disagreements between the church and the Roman populace, and with negotiating the release of two cardinals kidnapped by Frederick II during the infamous *sede vacante* of 1241.³⁰ In a period marked by jurisdictional and territorial disputes between the Hohenstaufen dynasty and the papacy, knowledge of the law was increasingly valued as a political tool.³¹ The two sides competed for the expertise of legal scholars and sought to mobilize notions of legal precedent in support of their claims.³² Most famously, the papacy and the imperial court both attempted to weaponize the Donation of Constantine by interpreting the spurious charter in fundamentally different ways.³³ Stefano Conti decided to have the papacy's interpretation of the charter – that the precedent set by Constantine's ceding of temporal power to the church confirmed the supremacy of the Holy See vis-à-vis Frederick II – rendered in fresco in his chapel dedicated to Saint Sylvester (see [Figures I.2](#) and [4.21](#)). The chapel paintings, along with the prominent figure of Solomon surrounded by a cycle of virtues and vices in the main hall, support our understanding of Stefano Conti's role in the papal administration as one defined by legal affairs. Furthermore, in the same manner that the Solomonic virtues cycle and the chapel frescoes suggest the value placed on judicial learning at the thirteenth-century Curia, the hall's mural as a whole leaves little doubt as to Conti's enthusiasm for all forms of knowledge. The hall frescoes were designed to extol learning by bringing together a variety of erudite motifs in a stylistically integrated pictorial scheme. As an integral part of these encyclopedic murals, the *artes liberales* promote the emergence of an intellectually sophisticated papal court eager to embrace the period's educational movement. Moreover, like the narrative cycle in the Sylvester Chapel, the liberal arts advance an implicit political argument on behalf of the papacy: Just as the Donation of Constantine asserted the pope's spiritual *and* temporal sovereignty, the main hall frescoes suggest that papal power is not just

grounded in theology and scripture but also in worldly learning. Accordingly, the frescoes proclaim the pontiff and his entourage of learned cardinals as having a legitimate claim to authority in all matters ecclesiastical and secular.

ARTES LIBERALES

In antiquity, the “liberal” arts had designated those pursuits suitable for free men who engaged in civic life and whose financial status exempted them from the chores of manual labor.³⁴ This pagan curriculum made its way into medieval intellectual discourse through authors such as Cassiodorus, Martianus Capella, and Augustine.³⁵ Augustine had taken a utilitarian view of the pagan sciences, highlighting their usefulness for biblical interpretation. In his treatise *On Christian Doctrine*, he argued that, just as the Israelites had taken gold and silver with them when they fled Egypt, Christians should appropriate those teachings of the heathens that were “suited to the service of truth.”³⁶ The sixth-century scholar Cassiodorus expressed a similar sentiment but made a more radical claim; he reasoned that there could be little danger in using the pagan sciences in the pursuit of a more profound understanding of biblical writings because, he argued, these interpretive tools were ultimately *derived* from scripture.³⁷ Later thinkers took more expansive views of the arts, suggesting that they had intrinsic value and could be studied for their own sake. Thus, the Carolingian monk Remigius of Auxerre asserted that the ancient disciplines were not simply an assortment of auxiliary skills but should be understood as a set of immutable truths “naturally inherent in the soul.”³⁸ This line of thinking was developed further in the twelfth century by the theologian Hugh of Saint Victor, who suggested that the study of the arts served a redeeming function because it set the mind on the path to philosophy and thus had the potential to restore humankind to a prelapsarian state of knowledge.³⁹

Martianus Capella’s allegory *De nuptiis Philologiae et Mercurii* (On the Marriage of Philology and Mercury) marks the first appearance of the arts as female personifications with distinctive attributes.⁴⁰ The poem recounts the elaborate marriage ceremony between the erudite Philology and the god Mercury, which culminates in the presentation of Mercury’s wedding gift, consisting of seven handmaidens. These maidens, the reader quickly learns, are in fact the seven liberal arts personified. In elaborate Latin, the fifth-century author goes on to describe the distinct physical appearance of each art as well as their strange attributes, which adumbrate the practical application of each science. Accordingly, *Grammatica* is an old woman in Roman dress with a pruning knife that she uses to snip off faulty pronunciation from the tongues of schoolchildren; *Geometria* is a “distinguished-looking lady” holding a compass and a globe; and *Dialectica* has a serpent coiled around her arm to signal her

propensity for convoluted utterances.⁴¹ Readers and listeners were clearly meant to conjure mental images of each figure in order to commit the sciences to memory. The didactic potential of Capella's vivid descriptions ensured that the work would become one of the most widely copied and influential school texts of the medieval period.⁴² Moreover, as Adolf Katzenellenbogen pointed out, because it "lent actual forms to mere concepts," the rich visual vocabulary in Capella's allegory facilitated the development of a strong pictorial tradition.⁴³

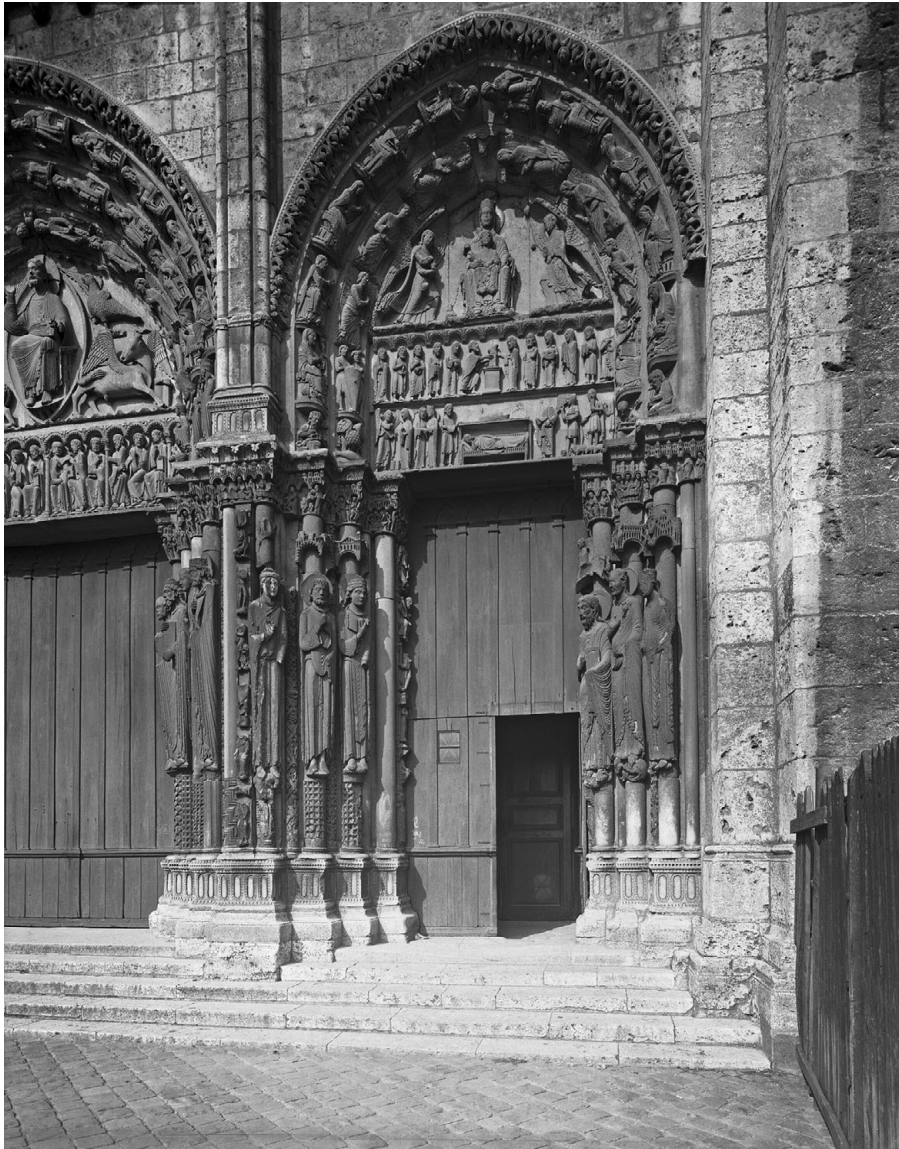
Although pictures of individual arts in personified form appear with some frequency in the early medieval period, representations of the *artes liberales* as a system are virtually non-existent prior to the twelfth century. A seemingly singular exception is found in a ninth-century manuscript now in Bamberg that shows a full-page illumination of the four mathematical sciences represented in the manner of ancient muses (Figure 2.7).⁴⁴ Each figure in the scientific quartet is identified by inscriptions and attributes: Geometry holds a measuring rod; Music plays a lute; Arithmetic counts with a string of beads; and Astronomy stands beneath a starry sky. This carefully balanced and richly colored composition appears in a luxury codex produced for Charles the Bald, which contains the text of Boethius's *De institutione arithmetica*.⁴⁵ It was in this



2.7. The four mathematical sciences (music, arithmetic, geometry, and astronomy), ca. 850. Staatsbibliothek Bamberg, Msc. Class. 5, fol. 9v. Photograph: Staatsbibliothek Bamberg, Creative Commons License, CC BY-SA 4.0.

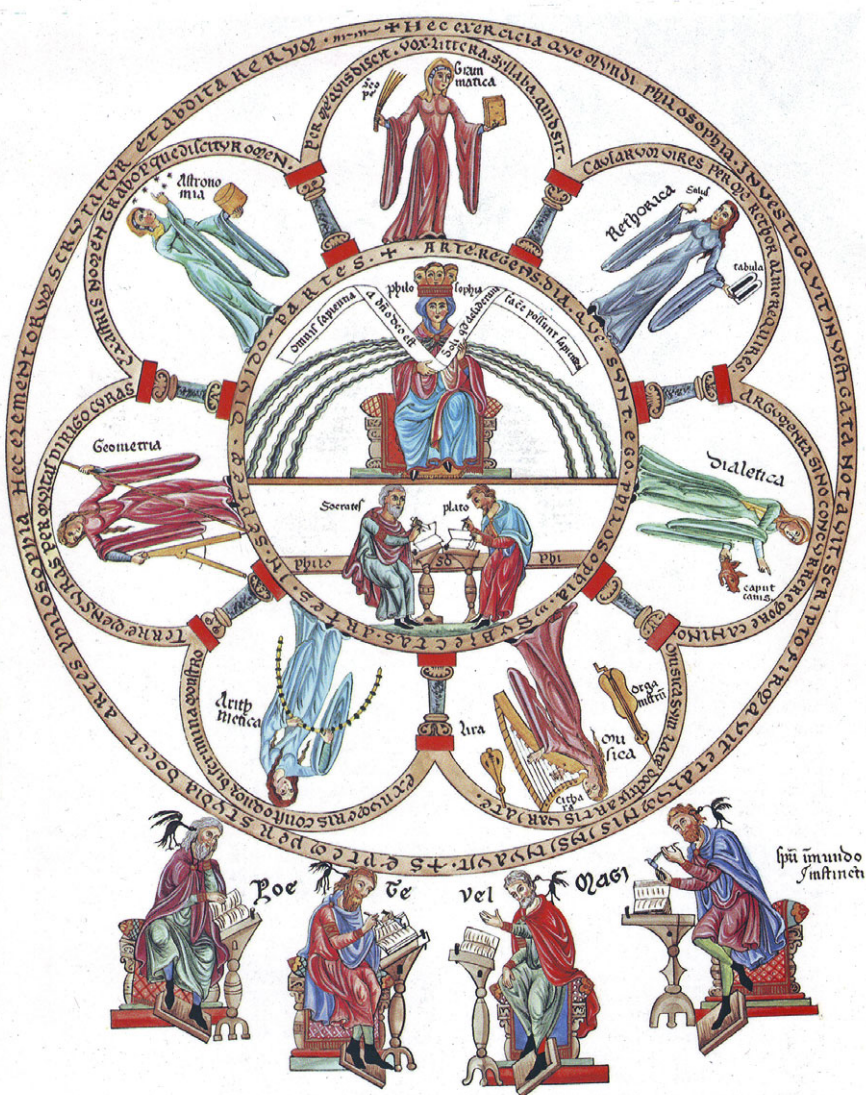
work that Boethius had introduced a new term to encapsulate the unity of the four mathematical sciences as a fourfold way, or *quadrivium*.⁴⁶ The analogous term *trivium* – denoting the philological sciences of grammar, dialectic, and rhetoric – appears to have emerged in the ninth century.⁴⁷ Theodulf of Orléans, the renowned poet and theologian of Charlemagne’s court, united the trivium and quadrivium in his ekphrastic poem titled *On the Seven Liberal Arts Depicted in a Certain Picture*.⁴⁸ In this text, the author conjures an elaborate diagram in the shape of a tree, whose branches are populated by personified arts. Theodulf describes in lively detail the arts’ personalities and attributes, inviting readers to mentally visualize the composition: Grammar sits at the root of the tree lashing a whip; Geometry takes measurements on a celestial globe; Dialectic hides a serpent in her sleeve; Music plays a lyre and a pan flute; and Astronomy, standing at the crown of the tree, studies the constellations and the planets. The picture poem, which Mary Carruthers describes as a “mnemonic for the liberal arts and their curricular relationship,” expanded on the inherent visuality of Capella’s text by organizing the arts into a unified pictorial program.⁴⁹ As Carruthers and others have argued, Theodulf’s poem was in all likelihood not a description of an actual material artwork but rather a mental picture “painted” in the mind of the author.⁵⁰ As such, the tree diagram exemplified the mnemonic technique of “locational memory,” which aimed to help its users internalize information by creating vivid cognitive images and placing them in clearly defined locations according to a systematic and logical plan.⁵¹ Yet, by introducing his composition as “*in pictura depictiis*,” Theodulf clearly wanted his readers to “see” the image as though it were an actual, material work of art. Such deliberate blurring of the boundaries between words and pictures served as an invitation for readers to reflect on the relationship between images and abstract concepts of knowledge as well as on the important ways in which learning utilizes the mind’s propensity for visualization.

From the twelfth century onward, pictorial cycles of the liberal arts emerged in a variety of media and contexts, from publicly directed sculptural cycles and manuscripts produced in monastic scriptoria to precious metalwork made for secular patrons.⁵² They appeared within the elaborate sculpted programs decorating the façades of cathedrals at Sens, Déols, Laon, and most famously Chartres, whose renowned cathedral school was an important center of twelfth-century philosophy (Figure 2.8).⁵³ In the realm of manuscript illumination, Herrad of Landsberg’s *Hortus deliciarum* (ca. 1170) encapsulated the notion of the *disciplinae cyclicae* in the form of a circular diagram with seven personified arts distributed in a radiating pattern around the enthroned figure of Lady Philosophy (Figure 2.9).⁵⁴ The seven arts are organized within arcades in clockwise fashion from grammar to astronomy, while inscriptions and attributes detail their individual areas of expertise. Included in the composition,



2.8. Representations of the seven liberal arts with scientific representatives, ca. 1145–70, west façade, right portal, Chartres Cathedral. Photograph: National Gallery of Art, Washington, DC / ARTstor Digital Library.

yet seemingly ostracized from philosophy in the proper sense, are four authors of the magical arts and poetry (*artem magicam et poetriam*) with devilish black birds whispering in their ears.⁵⁵ Herrad's diagram renders the arts as a contained system of knowledge; the disciplines form seven petals of an emblematic rose as though to underscore their classificatory status as interdependent subdivisions of the broader concept of philosophy.⁵⁶ The rosette emblem would become a favored device for liberal arts imagery: It was, for example, reimagined in



2.9. Modern facsimile of liberal arts diagram in Herrad of Landsberg's *Hortus Deliciarum* (Garden of Delights), original manuscript of ca. 1170 lost, formerly in Universitätsbibliothek Straßburg. Photograph: Wikimedia Commons.

monumentalized form in works such as Nicola Pisano's Siena pulpit (Figure 2.10) and in the splendid rose window of Laon Cathedral, where the arts appear to revolve like planets around an enthroned Lady Philosophy (Figure 2.11).⁵⁷

In presenting the system of the arts as a composite whole, such diagrammatic compositions echo the writings of Alan of Lille and Hugh of Saint Victor, both of whom stressed the unity of the seven liberal arts. In his *Anticlaudianus*, Alan emphasized the oneness of the seven sister arts; in visual appearance they are so



2.10. The base of Siena Cathedral's pulpit showing Nicola Pisano's sculpture of philosophy and the seven liberal arts, ca. 1265–8. Photograph: Scala / Art Resource, NY.



2.11. Stained glass window with representations of the seven liberal arts, philosophy, and medicine, ca. 1215, north transept, Laon Cathedral. Photograph: Stephen Shankland.

much alike that “under seven countenances they reflect one countenance: one faith and one will guide those whom one face, one family, one age, one form, one power encompass.”⁵⁸ Similarly, Hugh of Saint Victor insisted that the seven sister arts “are so united among themselves, and need each other so much, that if one of them is missing the others cannot form the philosopher.”⁵⁹ Yet, in the visual arts, this unity was not as stable as one might think. A survey by Michael Evans has demonstrated that medieval viewers would have frequently encountered pictorially rendered cycles that deviated from the “canon” of seven arts.⁶⁰ The Laon rosette, for example, expanded the number to eight by including the art of medicine along with the trivium and quadrivium; and Theodulf’s poem on the “seven liberal arts” (*septem liberalibus artibus*) included a quartet of virtues that together formed the concept of ethics. Beyond the number of disciplines included, considerable variation is also found in the gender and attributes assigned to personifications, and in the presence (or absence) of supplementary characters to further distinguish the disciplines.

The frontispiece of a thirteenth-century copy of Brunetto Latini’s *Le livre du trésor* takes an extraordinarily expansive view of the arts system (Figure 2.12).⁶¹ This full-page illumination displays an elaborate grid of twenty-one arts and sciences: In the central column, the seven disciplines of the trivium and quadrivium are organized from grammar at the bottom to astronomy at the top. Each discipline is “personified” by a seated instructor giving lessons in his or her area of expertise. The two lateral columns enlarge the scientific repertoire by introducing an additional fourteen branches of knowledge ranging from mechanical activities such as carpentry, painting, and the production of manuscripts to intellectual activities such as medicine, civil law, and necromancy.⁶² The enthroned figures appear to include both male and female personifications: Music is represented as a monk; Rhetoric appears as a noble woman; and Arithmetic is a young red-haired man. At the top of the pictorial grid, a large personification of philosophy wraps her arms around the entire composition so as to expand the notion of *philosophia* to include both mechanical and occult sciences. That philosophy is personified in the customary fashion, as a single female figure, draws attention to the distinctly “narrative” character of the twenty-one framed disciplines. The panels do not attempt to represent the sciences as immutable concepts; instead, they emphasize their everyday instruction and practice by mobilizing a mode of painting evocative of that used for depictions of the months in medieval calendar cycles.

Comparable degrees of variety are found within the tradition of pairing allegorical personifications with the ancient scholars commonly associated with each discipline. Emerging in arts cycles of the twelfth century, such scholarly exponents served among other things to anchor abstract allegorical concepts in authoritative textual sources. Yet, there was no firmly established system to



2.12. Twenty-one scenes representing the arts and sciences, ca. 1270–1300, frontispiece to Brunetto Latini's *Le Livre du Trésor*. London, British Library, Ms. Add. 30024, fol. 1v. Photograph: © The British Library Board (Ms. Add. 30024, fol. 1v).

indicate which art should be paired with which author; and so Cassiodorus, Euclid, and Boethius could all be called on to represent geometry, while the art of dialectic might be exemplified by Porphyry, Aristotle, or the Iranian prophet Zoroaster. Further variety existed in the gendering of personifications.

Modern scholarship has often asserted that medieval personifications were gendered according to grammar, which is to say that since abstract nouns in Latin are feminine, concepts such as *geometria* and *arimetica* should be personified as women.⁶³ Medieval arts imagery in fact shows that artists of the period had more flexible attitudes and would on many occasions depict individual disciplines as male or gender-neutral. For example, the maker of the arts medallions on a twelfth-century enamel casket, now in the Victoria and Albert Museum, depicted rhetoric as a man holding scales and labeled as *Retorica*.⁶⁴ Likewise, the illuminator who produced a captivating arts cycle at the Scheyern monastery in the 1230s rendered the arts of geometry and arithmetic as men, and conspicuously labeled them as “GEOMETRIA” and “ARITMETICA” (Figure 2.13). Such examples question the designatory role of grammar in medieval personification imagery and shed new light on the representation of grammar at Santi Quattro Coronati. As we will see, this figure appears as the sole art to be visualized in the form of a masculine body, and, as such, it self-reflexively negates its own role in determining visual appearances in the world of personificational imagery.

UNIDENTIFIED ORIGINATORS

Santi Quattro Coronati’s liberal arts cycle builds on these diverse traditions and explores new territory through the development of purposeful ambiguity. Although the lunettes of the south bay have suffered significant losses, iconographic comparisons between images in the cycle and liberal arts imagery found in manuscripts and sculptural works allow us to draw preliminary conclusions about the frescoes’ nature and purpose in their setting. In what follows, I highlight the ways in which Cardinal Conti’s *artes* reflect the changing status of learning in the period, in part by promoting knowledge as an aspect of political power. Yet, as we will see, the paintings were also designed to spur thinking and debate among their courtly beholders. The mural’s capacity to engage viewers in reflective looking resides particularly in the dynamic relations that arise between the personified *artes* and the philosophers whose identities appear to have been concealed intentionally. The unidentified philosophers required viewers to work out among themselves who ought to be considered the rightful authority on this or that science and – by extension – which textual sources were the most trustworthy on a given topic.

As the best preserved pictorial field of the cycle, the representation of geometry on the west wall serves as a useful starting point for deciphering the program’s compositional logic (see Figure 2.2). The woman representing geometry on the right is clearly identifiable; her compass was the standard attribute for the science of measurement in medieval art, and an inscription to the right of her head labels her as “[GEOME]TR[I]A.” By contrast, the identity of the older male philosopher is obscure; the figure is not labeled,



2.13. Top register shows male personification of Arithmetic accompanied by Nicomachus (left) and Apuleius (right); bottom register shows male personification of Geometry accompanied by Euclid (left) and Boethius (right), ca. 1250, introductory liberal arts sequence in copy of Petrus Comestor's *Historia Scholastica*. Munich, Bayerische Staatsbibliothek, Clm. 17405, fol. 4v. Photograph: Bayerische Staatsbibliothek, München.

and the generic nature of his inscribed scroll is unlikely to have been associable with a specific textual source.⁶⁵ At the same time, the figure's gray hair and beard – along with his toga, scroll, and throne – mark him clearly as an author of the ancient world. Furthermore, viewers could draw on context and well-established pictorial conventions to further designate the elder as an exemplary

representative of the science of geometry. His role in the geometry fresco is analogous to that of the historical heroes and villains in the cycle of virtues and vices in the north bay, and the depictions of Hippocrates and Galen as representatives of medicine in the Anagni crypt (see [Figures 1.35](#) and [5.2](#)).

The geometry scene appears to portray a classroom demonstration. The seated philosopher leans forward to explain one or another geometric principle, while Geometry draws out the master's theoretical lesson with her compass. The figures' intensely locked gazes, along with the seeming eagerness of the philosopher, who sits on the edge of his seat, spark curiosity about the precise nature of their conversation. Is the topic of their tutorial the same as that written on their parchments – that geometry concerns itself with determining spatial dimensions – or are they sharing a more profound insight about the transcendent significances of geometric proportions? And who is the philosopher – or rather, with whom ought we identify him? Is he Archimedes, whose ideas were becoming increasingly available in the period, or Euclid, whose *Elements* had been translated from Arabic in the previous century?⁶⁶ Is he perhaps Boethius, one of Euclid's early translators, and the mediator *par excellence* of the ancient quadrivial sciences?⁶⁷ Comparable ambiguity permeates the representations of grammar and music, and it likely extended to the less well-preserved scenes of astronomy and arithmetic. For example, Music on the south wall is clearly identified by her chime and inscription, whereas the identity of the man strumming a *cithole* is left open to conjecture.⁶⁸ Viewers were accordingly free to identify the philosopher with the Greek philosopher Pythagoras, the Old Testament figure Tubal (both of whom were credited with having discovered the principles of musical harmony), or indeed with any number of musical theorists. The figure was purposefully left devoid of identification, precisely so that it could hold multiple identities.

The representations of music and geometry both treat their respective sciences in sweeping terms. The scrolls held by personifications and exponents invariably provide broad definitional statements – that geometry is the science of measurement and starts with a single point, and that music is the art of modulation and the movement of the voice. As such, the two images could serve as visual cues for expansive reflection and discussion on the manifold roles played by geometry and music in the period's cultural discourse. On the one hand, the principles of harmony, ratio, and proportion that undergirded both branches of knowledge could be understood speculatively as expressions of deep religious and philosophical truths. On the other, such principles were applied practically when choristers sang in tune and when builders used exact measurements and units instead of “eyeball estimates” to construct a house or church. These speculative and practical dimensions sometimes converged, as when sacred music was understood as divine proportionality made audible, or when exegetes interpreted Noah's Ark, Solomon's Temple, or Ezekiel's

Tabernacle in the technical language of practical geometry. Both art forms could also be assessed through a secular lens as expressions of ancient theoretical rigor exemplified by the writings of Plato or Euclid; or they could be understood in sacred terms as expressions of the rationality of the divinely created cosmos. The ambiguous philosophers and the open-ended nature of the imagery's inscriptions facilitated an open-ended discourse that could proceed along several potential paths. Rather than impressing predetermined perspectives on its spectators, the arts cycle at Santi Quattro Coronati was designed as a platform for intellectual discussion and an opportunity for its courtly beholders to showcase erudition and perhaps even reminisce about years spent studying at cathedral schools and universities.

The frescoes' emphasis on antiquity's intellectual heritage meant that the discussions they spurred among their courtly beholders could easily arrive at a central tension in the period's theological discourse. The twelfth and thirteenth centuries were a period of intense debate about the state of the liberal arts vis-à-vis revelational theology and a rapidly expanding corpus of natural philosophical texts.⁶⁹ A recurring problem in this debate concerned the reconcilability of apparent contradictions between the writings of ancient authorities, the commentaries of Islamic philosophers, and the teachings of church fathers.⁷⁰ More often than not, such discourse boiled down to the question of whose writings offered the most trustworthy opinion on a given subject. Writing in the third quarter of the thirteenth century, Albertus Magnus captured the period's increasingly nuanced attitudes toward scientific sources: "Augustine is to be preferred rather than the philosophers in case of disagreement in matters of faith. But if the discussion concerns medicine, I would rather believe Galen or Hippocrates, and if it concerns things of nature, Aristotle or anyone else experienced in natural things."⁷¹ The artistic practice of anchoring a branch of knowledge in the authority of an ancient author inserted itself into such debates by promoting the work of one particular scholar, by passing the question on to beholders, or by hedging around the problem by including more than one authority for a given discipline.

One of the earliest preserved graphic renderings to pair the arts with ancient exponents is a circular diagram on the last page of a manuscript produced in the mid-twelfth century at the Benedictine monastery of Admont ([Figure 2.14](#)).⁷² The *rota* omits human figures in favor of a diagrammatic ekphrasis on the relationship of the arts to philosophy. At the center of the rosette, a text describes Philosophy as an enthroned figure squashing two kings under her feet. Fourteen surrounding arches conjure images of the arts and their representatives: Dialectic holds a key and is accompanied by Aristotle; Rhetoric holds a sword and is accompanied by Cicero; Grammar holds a bowl emitting flames and is accompanied by Priscian; Music holds a monochord and is accompanied by Pythagoras; Arithmetic, with a rod, is accompanied by



2.14. Liberal arts diagram, ca. 1150. Chicago, Newberry Library, Ms. F. 9, fol. 65v. Photograph: Newberry Library.

Nicomachus; Geometry, with a terrestrial sphere, is accompanied by Euclid; and finally Astronomy holds a celestial sphere and is accompanied by Ptolemy. The diagram's verbal descriptions are remarkably straightforward and precise, detailing attributes, garments, and poses, as well as the written scrolls exhibited by the figures. The graphic *rota* therefore presents itself as a set of instructions for the making of another image.

Curiously enough, a series of full-page drawings found in a nearly contemporaneous manuscript from Aldersbach displays figures of the liberal arts and their exponents with attributes and scrolls that closely match those described verbally in the Admont diagram.⁷³ For example, the diagram's description of Rhetoric reads: "Rhetoric: a virgin, in her right hand a drawn sword, in her



2.15. Personification of Rhetoric with Cicero, twelfth century. Munich, Bayerische Staatsbibliothek, Ms. Clm 2599, fol. 104v. Photograph: Bayerische Staatsbibliothek München, Clm 2599, fol. 104v .

left this verse: ‘learn my art you who wish to speak well’; Cicero, a young man toward her; in his right hand he holds the same verse, in his left an upright staff.”⁷⁴ Correspondingly, folio 104v of the Aldersbach codex displays a figure of Cicero rendered in the manner of a dashing troubadour courting the sword-wielding figure of Rhetoric (Figure 2.15). The two figures appear beneath a circular arcade and hold between them a scroll with an inscription identical to that described in the Admont diagram.⁷⁵ While the iconographic correspondence is striking, a number of important differences exist between the two works. Rather than depicting a self-contained diagram, the Aldersbach illuminator extended the arts cycle across several folios. The artist moreover revised the scholarly representatives for the arts of geometry and arithmetic – substituting Cassiodorus for Euclid as the exponent of geometry; and Boethius for Nicomachus as the representative of arithmetic.⁷⁶ Moreover, the Aldersbach artist expanded significantly the repertoire of classical authors by adding a series of twenty-two full-scale portraits of figures such as Virgil, Pliny,

Horace, Ovid, Macrobius, Martianus Capella, and the Seven Sages.⁷⁷ Thus, considered in relation to the former diagram, the Aldersbach codex pointedly diffused the question of ancient knowledge's origins by highlighting the diversity of sources that constitute the period's cultural heritage.

Images such as the Admont diagram sketch a relatively straightforward picture of the relationship between the liberal arts as abstract concepts and their theoretical grounding in individual authors or texts; however, well-read viewers were likely aware that medieval texts ranged quite significantly on questions surrounding the liberal arts' origins, and on the relative authority of one scholar versus another. Thus, while the handmaidens of Martianus Capella's nuptial allegory have their cultural origins variously in Egypt, Greece, or Rome, scholars such as Remigius of Auxerre argued vehemently for the arts' Judeo-Christian origins. Remigius asserted that all science had originally emerged in the period before the Deluge and was preserved for future generations by the descendants of Noah. According to Remigius's account, Noah's three sons knew the world was about to be wiped out and so they decided to chisel all knowledge concerning the liberal arts on two columns, one fashioned from brick and one from stone. Their durable materials allowed the columns to survive the flood and subsequently be discovered by Abraham, who revitalized and further disseminated the arts.⁷⁸

The encyclopedist Isidore of Seville, who was active about two centuries before Remigius, had taken a more discursive approach. He embraced the complexity of textual transmission and constructed complicated genealogies of the "founders" (*de inventoribus*) of the seven liberal disciplines. Thus, in his *Etymologies*, one reads that the art of rhetoric was "invented by Gorgias, Aristotle, and Hermagoras, and was carried over into the Latin culture by Cicero and Quintilian."⁷⁹ Similarly, mathematics, according to Isidore, had risen with Pythagoras and was further developed by Nicomachus, Apuleius, and Boethius.⁸⁰ By the twelfth and thirteenth centuries, the question of origins was therefore decidedly unsettled; even primers in classical education such as Cassiodorus's *Introduction to Divine and Human Letters* did little to clarify the situation. For instance, a monk studying the illuminations of the Aldersbach codex would encounter Cassiodorus as the chosen authority on geometry.⁸¹ Yet, if this same monk were to study Cassiodorus's own writings on the science of measurement, he would realize that the author relays responsibility to Euclid, Apollonius, Archimedes, Censorius, and Boethius.⁸²

The arts sequence in a thirteenth-century manuscript from Scheyern engages with this idea of multiple points of origin by including two scholarly exponents for each discipline.⁸³ In this codex, eight neatly symmetrical renderings of philosophy and the arts serve as prefatory material for Petrus Comestor's twelfth-century theological textbook known as *Historia scholastica*.⁸⁴ At the top of folio 4r. we find grammar depicted as a woman

identified as Gorgias and Cicero. This quartet of Greco-Roman philosophers plays dual roles in the pictorial program. They are at once the scholarly authorities of their respective arts; and, at the same time, they figure as the originary students of grammar and rhetoric. Their differing ages furthermore indicate the gradual progression of a liberal education in which the study of grammar precedes the study of rhetoric. With the exception of music, each of the arts in the manuscript's cycle is accompanied by two scholarly representatives – Astronomy is flanked by Ptolemy and Atlas; Dialectic by Porphyry and Aristotle; Philosophy by Plato and Socrates; Geometry by Boethius and Euclid; and Arithmetic by Nicomachus and Apuleius.⁸⁵ The sequence of illuminations accordingly suggests to viewers that the production of worldly knowledge occurs incrementally over time and through the contributions of multiple scholars. The cycle also advances a moral lesson by implying that these renowned scholars attained their authoritative status by being exceptional students of their disciplines.

The arts cycle at Santi Quattro Coronati promotes a similarly nuanced view of the genesis and historical transmission of knowledge. The unnamed originators presuppose viewers who share an interest in intellectual discourse and who would find pleasure in testing their own knowledge against that of others in the room. For Conti and other members of the papal court, the frescoed *artes liberales* could have served as a medium for reflecting on the continuous change that defined the period's knowledge, and as an invitation to reminisce about their student years at Paris, Bologna, or one of Europe's other universities. It is possible that the frescoes' discursive design was in part inspired by arts imagery found in the French educational context. The sculpted liberal arts cycle on the west façade of Chartres Cathedral is particularly suggestive of such a link on the basis of its iconographic and conceptual parallels to Conti's murals and, more circumstantially, because the path to the Curia for Roman noblemen increasingly passed through educational institutions in France. At Chartres, seven personifications of the arts interspersed with scholarly representatives line the outer archivolt of the south portal to serve as a frame for a central image of the Virgin and child (Figure 2.17). All fourteen figures sit on ornate thrones, and though none are identified by *tituli*, the personified arts can be distinguished quite straightforwardly by means of their gestures and attributes: Geometry holds a compass, Music plays a chime, Grammar brandishes a whip, Astronomy contemplates the night skies, and so forth. As at Santi Quattro Coronati, the identities of the historical exponents can only be inferred through their physical placement within the program, through adjoining specific and identifiable arts, and by reference to external visual and written sources.

The Chartres program places particular emphasis on textual transmission of knowledge. The scholarly representatives are depicted sitting in their scholarly lairs, holding pens, resting portable writing cases in their laps, and thus in the



2.17. Representations of the seven liberal arts accompanied by scientific representatives, ca. 1145–70, west façade, right portal, Chartres Cathedral. Photograph: B. O’Kane / Alamy Stock Photo.

process of *writing* their authoritative texts. Medieval viewers looking up at these *auctores* would have been prompted to speculate about their identities and make attempts to link each unidentified scholar to a specific written source. In the twelfth century, such observers would have included the students of the famous cathedral school, the majority of whom hailed from the upper echelons and had traveled to Chartres in order to study the liberal arts under the supervision of the period’s foremost intellectuals. These students would have been aware of the difficulty in matching the unlabeled figures to specific scholars because their diverse curricula impressed upon them that there was always more than one authority to choose from. The varied course of study at the cathedral school can be gleaned from the vast textbook compiled by Thierry of Chartres, who served as its chancellor around the time that the portal’s sculptures were made.⁸⁶ This treatise, known as the *Heptateucon*, outlined the system of the arts and included an anthology of classical texts, organized according to their relevance for the seven disciplines.⁸⁷ Thierry’s *Heptateucon* indicates that students at Chartres would assimilate the teachings of a multiplicity of authors: For the key principles in dialectic, they would study

Porphry and Aristotle, while the curriculum for astronomy included works by Hyginus, Ptolemy, and al-Khwārizmī. Other scholarly texts, in particular those of Boethius and Martianus Capella, were not exclusive to one discipline but recurred in different programs of study. For the Chartres students, then, the liberal arts cycle on the south portal would set up a productive tension between their impulse to identify the scholarly representatives with specific authors and their awareness that more than one alternative was always available. In a similar manner to Conti's frescoes, the open-ended nature of the south portal sculptures instills a didactic-mnemonic quality that would have enabled observers to test their knowledge of the scholarly curriculum and engage in constructive discourse about which scholars and texts were the primary representatives of a given scientific field. As at Santi Quattro Coronati, this heuristic quality relies on the fact that the scholarly representatives are not labeled.

While there are significant differences in medium and setting between the Roman frescoes and the Chartres sculptures, both pictorial schemes advocate for the harmonious coexistence of worldly and sacred knowledge. In Conti's hall, the case for such epistemic unity was related to the papacy's political claims to supreme jurisdiction in worldly as well as religious affairs. In their ecclesiastical-educational setting at Chartres, the sculptures of the liberal arts foreground the unity between theological wisdom and the wisdom inherited from antiquity. Scholars have interpreted the theological orientation of the Chartres program in relation to Thierry of Chartres's nuanced perspective on the liberal arts.⁸⁸ In titling his work *Heptateucon*, the name used to describe the first seven books of the Bible, Thierry proposed an analogy between scripture and the systematic study of worldly knowledge.⁸⁹ Like other scholastic thinkers, he considered the study of the liberal arts as a pathway to philosophy, which – in turn – opened onto theological knowledge of God.⁹⁰ With subtle iconographic ingenuity, the Chartrian sculptural program expresses a comparable notion of the unity of divine wisdom and worldly knowledge. As Katzenellenbogen has pointed out, the south tympanum's iconic image renders the Virgin's lap as a form for the *sedes sapientiae* on which Christ is enthroned as a new Solomon.⁹¹ The cycle of arts and scholarly exponents encircles this central emblem of wisdom to suggest that the path to greater understanding of God leads through the study of worldly disciplines and the writings of ancient intellectual authorities.⁹²

LETTERS, WORDS, AND THE GENDER OF KNOWLEDGE

As foundational disciplines, the arts of grammar and arithmetic occupied analogous positions within the arts system. Their respective domains of letters and numbers constituted the essential building blocks from which other

branches of knowledge were constructed.⁹³ The representations of arithmetic and grammar at Santi Quattro Coronati focus attention on this elemental status (Figures 2.1 and 2.4). In the west lunette, an ancient philosopher points to the basic units of grammar: the letters of the alphabet spelled out in large majuscules on the open codex. Analogously, the image of arithmetic in the south lunette depicts the basic manual operation of counting by the joints of the fingers and foregrounds the number one as the first and most elemental of the numbers. Both frescoes differ from “standard” representations of the two arts: Arithmetic was customarily rendered in the form of a woman holding a bead of strings for calculating, while grammar was commonly pictured as a scene of childhood learning and often featured a stern woman teacher wielding a whip against schoolboys. By contrast, the frescoes at Santi Quattro Coronati deploy compositional strategies and motifs to place fresh emphasis on the roles of grammar and arithmetic in the cultural processes of knowledge preservation and dissemination. This is particularly the case in the image of grammar and the verbal arts in the west lunette, which raises a number of interpretive problems on the basis of its unusual composition. Here, motifs such as the alphabetic codex invite reflection on the relationships between writing, thinking, and cultural memory, while the enthroned figure might represent a significant rethinking of the division of the verbal arts into three distinct fields. On closer examination, the image appears to interrogate representational conventions for personification imagery by questioning the influence exerted by its represented discipline on the visual gendering of knowledge.

While the right half of the west lunette appears to represent the entire trivium in a single pictorial field, it can be understood in at least two ways.⁹⁴ The severely fragmented figure on the left was likely a front-facing female personification, as suggested by the bejeweled throne, the positioning of her knees, and the sumptuous flow of her mantle. This figure could be interpreted as grammar personified and, accordingly, the companion to the male philosopher who in turn should be interpreted as the art’s scientific representative. In such a reading, the omission of rhetoric and logic would indicate a decidedly broad understanding of grammar as encompassing all linguistic sciences. The twelfth-century scholar Bernard of Chartres had reportedly taken such an expansive view of grammar by equating the discipline with what we today would associate with the term philology.⁹⁵ A different, and perhaps more plausible, interpretation would identify the enthroned figure as a composite personification of dialectic and rhetoric. Under this reading, the painters and planners of the Santi Quattro Coronati frescoes drew on textual precedents that had defined rhetoric and dialectic as a dissimilar, yet interlocked, pair of sciences. Indeed, medieval thinkers wrote quite frequently of dialectic and rhetoric as a unit. According to Hugh of Saint Victor, for example, the two were joined together under the concept of logic.⁹⁶ Before

Hugh, earlier medieval writers had presented dialectic and rhetoric as rival twins with shared origins yet opposite demeanors. Thus, in the second book of his *Etymologies*, Isidore described their differences with a hand metaphor: “Dialectic and rhetoric are like the clenched fist and the open palm of a man’s hand: the former pinches words, the latter extends them.”⁹⁷ Theodulf of Orléans argued along similar lines in his arboreal picture poem, in which the twin concepts of dialectic and rhetoric sit together on one branch of the tree to form logic. Theodulf further elaborated on their difference in unity by describing both arts as rational and argumentative yet with divergent methodologies:

Not far from [Rhetoric] sits Dialectic, the mother of meaning. The former was seen to be standing; this one was sitting. Their action is the same in meaning; but different in many ways, because the former speaks while standing, when this one reads while sitting. The one seeks crowded and noisy places; the other secluded ones; the one seeks the forum continuously, the other seeks the pen. The one devises a method for speaking, the other for morals. The one is a source for words, the other for thought.⁹⁸

Taken together, Isidore and Theodulf conjure a concept of entwinement wherein dialectic and rhetoric exist as two bodies joined at the hip, yet in a state of perpetual tension. It is possible that the Santi Quattro Coronati fresco engaged with such conceptualizations by uniting the two philological sciences in the body of a single personification. If so, the female figure was installed on a throne to differentiate it from the remaining personifications in the cycle, all of whom are represented in stride and moving from right to left. From what remains of the fresco, it also seems that the enthroned figure of dialectic-rhetoric was modeled on images of Lady Philosophy, who appeared frequently in twelfth- and thirteenth-century arts cycles. As discussed above, Philosophy appears in the manner of an empress enthroned at the center of images such as the *Hortus deliciarum* diagram and Laon Cathedral’s stained glass rosette (Figures 2.9 and 2.11). Lady Philosophy’s combinatory role, as the concept that embraced the seven liberal arts, made her a suitable iconographic model for representing dialectic and rhetoric in amalgamated form.⁹⁹

The hypothesized consolidation of rhetoric and dialectic turns the right half of the lunette into a genuine image of the trivium. Yet, it also places additional signification responsibility on the male representative of grammar, who now serves as the art’s practitioner and theoretical authority as well as its sole embodiment. As the first stage in the medieval educational sequence, grammar was frequently represented in the poetic and visual arts as a scene of childhood instruction. The discipline appears in this form in Laon’s rose window, where a whip-wielding Grammar turns to face two schoolboys taking notes on writing tablets (Figure 2.18). Comparable compositions appear on the Chartres portal



2.18. Grammar, ca. 1215, stained glass window, north transept, Laon Cathedral. Photograph: Stephen Shankland.

and in the intimate scene created by Nicola Pisano for the Fontana Maggiore in Perugia, where Grammar embraces a young student as he bends over a codex to trace the words on the page with his finger (Figure 2.19).¹⁰⁰ These representations emphasize the learning of grammar as a prepubescent activity intended to lay the foundations for continued study in more advanced verbal and numerical arts. The Santi Quattro Coronati image advances a different side of grammar by depicting the discipline in the form of a single male philosopher. In his roles as instructor and theoretical exponent, the philosopher connects grammar's role in adolescent education to its more profound philosophical dimensions. Beyond its status as gateway to the study of literature and the scriptures, grammar was considered by some a stimulant to philosophical contemplation.¹⁰¹ Grammar "guides our every forward step in philosophy," John of Salisbury wrote in his *Metalogicon*.¹⁰² John's presumed mentor, Bernard of Chartres, held a similarly exalted view of grammar, arguing that it provided the rules and principles of philosophy and thereby assembled in the mind a cognitive structure that made rational thought possible.¹⁰³

The image's double focus on the elemental and the profound is encapsulated in the motif of the alphabetic codex. The philosopher directs attention to the letters of the alphabet in a gesture that is at once pedagogical *and* an invitation to reflect on the deeper significance of writing as a medium for



2.19. Nicola and Giovanni Pisano, Grammar and Dialectic, ca. 1278, Fontana Maggiore, Perugia. Photograph: Author.

the preservation and dissemination of knowledge. The combined simplicity and profundity of the gesture emerges with greater clarity when considered in relation to Isidore of Seville's thought on words and letters. According to the early medieval encyclopedist, our knowledge of things is intrinsically bound to the words that name those things; letters had therefore been invented to prevent knowledge from slipping into oblivion.¹⁰⁴ Isidore goes on to suggest that the particular disseminative power of letters resides in their visuality: "[L]etters are tokens of things, the signs of words, and they have so much force that the utterances of those who are absent speak to us without a voice, for they present words through the eyes, not through the ears."¹⁰⁵ Accordingly, words are visual repositories of knowledge that can be unlocked by the grammarian. This was particularly the case for nouns – words that name people, places, and things – which lent themselves to etymological analysis. Nouns, Isidore argues, contain within their etymological roots the essential knowledge about things: "The noun [*nomen*] is so called as if it were 'denoter' [*notamen*], because by its designation it makes things known [*noscere*, ppl. *notus*] to us. Indeed, unless you know its name [*nomen*], the knowledge of a thing perishes."¹⁰⁶ In this sense, grammar was raised far beyond the level of spelling and syntax; rather, it was a form of epistemology.¹⁰⁷

Isidore's ideas on the intrinsic relationship between words and knowledge sheds light on the way in which the image of grammar at Santi Quattro

Coronati foregrounds the epistemological and philosophical import of the discipline. There is no adolescent learning to read, no whip or other instrument of indoctrination. Instead, the simple gesture of pointing to the letters written on the page serves to remind viewers that the role of the grammarian is more than just to improve the speech of young children (Figure 2.1). Persons expert in grammar – so the image implies – have built for themselves a rigorous cognitive structure that fosters complex thinking; and through their mastery of words and etymology, they possess not only a rich vocabulary but the key to unlocking the knowledge concealed within written signs.

My reading of the west lunette identifies the philosopher as both theoretical exponent and personification of grammar. As we have seen, it was not uncommon in medieval art to find a liberal art personified in the form of a masculine body. Yet, a male *Grammatica* produces a particularly lurid effect inasmuch as it implicitly questions the often encountered rationale that the gender of personifications was governed by the laws of grammar.¹⁰⁸ This view has been articulated primarily by modern commentators who argue that the grammatical gender of abstract Latin nouns such as *philosophia*, *arimetica*, and *geometria* required corresponding figures to assume female form.¹⁰⁹ Such grammatical explanations for the choice of gender appear commonsensical; yet, as recent critics have noted, they overlook important factors such as poetic precedent and cultural perceptions of femininity.¹¹⁰ On the one hand, works such as Boethius's *Consolation of Philosophy*, Prudentius's *Psychomachia*, and Capella's *Marriage of Mercury and Philology* had created a substantial cast of female personifications that could be repurposed for any number of contexts. The significant influence exerted by these works on medieval cultural production likely played a more important role than grammatical rules in establishing medieval gender conventions. Furthermore, medieval discourse was marked by a broad perception of ornament and figuration as “womanly” traits.¹¹¹ Behaviors and activities such as wearing opulent garments and speaking in richly allegorical language were almost by default understood as feminine.¹¹²

The complexity of medieval views on the question of grammatical gender as it related to ideas of femininity and masculinity invites consideration of the writings of Alan of Lille, who delved into the problem with a grammarian's rigor and with an intricate set of prejudices about sexuality. The twelfth-century author believed that committing deliberate grammatical errors, as when a rhetorician overindulges in clever tropes and figures of speech, was a sin against nature and resulted in a loss of masculinity. In *De planctu naturae*, he argued that a male orator who “extends too far the laws of grammar” suffers a self-inflicted mutilation of the body wherein he becomes half woman.¹¹³ He was, in other words, suggesting that the use of corrupt grammar and excessively colorful language effectively feminizes the rhetorician. Alan's strong views on grammatical correctness came into conflict with his overall

misogynist outlook as he set out to describe the *artes liberales* in the text known as the *Anticlaudianus*.¹¹⁴ Here, Alan clearly understood the liberal disciplines as inherently masculine pursuits. The arts therefore *ought* to be personified as men, but grammar prevents one from visualizing them as such. In search of a compromise, Alan instead attempted to instill his female arts with male qualities, for example by stressing that the whip held by the breastfeeding Grammar is a symbol of her masculine propensity for discipline, so that “in one and the same action she is father and mother.”¹¹⁵ In similar fashion, he defined arithmetic as “a man by intelligence, a woman by sex . . . in one way a woman, one way a man, in mental capacity she is not a ‘she’; but a ‘he’.”¹¹⁶ The result was a series of portraits with complex identities that betrayed the author’s internal conflict between inherited cultural prejudices and commitment to grammatical rules. In the end, readers are left with the impression that Grammar holds a debilitating sway over the despondent Alan; with her switch and strict rules, she prevents him from fully realizing his poetic vision.¹¹⁷

By contrast, artists such as the illuminator of the Scheyern codex were less concerned about grammatical conventions. In the manuscript’s arts cycle, six of the eight arts are rendered explicitly as feminine figures with hair falling past their shoulders and wearing the distinctive women’s headdress known as a *barbette* pinned under the chin. On the other hand, geometry and arithmetic appear as male personifications, each accompanied by two scholarly exponents (Figure 2.13). The top half of folio 4v shows arithmetic as an older male figure, iconographically comparable to medieval representations of ancient philosophers, or to the way in which artists depicted the Father in images of the Trinity.¹¹⁸ The seated figure exhibits a large counting board known as an *abacus*. He is flanked by two adolescent students identified as Nicomachus and Apuleius, both of whom were well-known exponents of the mystical properties of numbers.¹¹⁹ The artist’s flexible attitude toward the gender of personifications carries over into the compartment below, where Boethius and Euclid flank a youthful personification of geometry holding a globe. Here, the exponents are rendered as aged philosophers, whereas geometry is figured as a vaguely gendered youth who calls to mind femininely coded representations of Christ in early Christian art.¹²⁰ Like the philosopher-grammarian at Santi Quattro Coronati, these compositions complicate the idea that abstractions should be assigned the sex that their grammatical gender requires. In the manuscript, the implicit critique of grammar’s gender-defining capacity is reinforced by the allocation of two clearly legible labels to the central figures. Above the head of the overtly masculine arithmetic, the feminine noun ARITMETICA is spelled out in Latin majuscules; while directly above the gender-fluid geometry we find – as though in rebuke of grammar and her rules – the word GEOMETRIA.

MUSICA PRACTICA AND MUSICA THEORICA: A CASE STUDY

The right half of the south lunette depicts music as a lively get-together with multiple performers and meticulously rendered instruments (Figure 2.3). To the right, a boy dressed as a young nobleman boogies animatedly while manipulating the levers of an organ; the instrument's proportionally drawn pipes are fed by a second student who crouches to operate a bellows. To the left, and now quite fragmented, an enthroned theoretician joins in with a stringed instrument reminiscent of a medieval *citole*.¹²¹ In the center, a capering Music attempts to keep the orchestra in tune by ringing the bells of a chime. In the midst of this multi-tonal performance, Music's scroll implies the presence of yet another instrument, the human voice: "Music is the movement of the voice and the science of modulation."¹²² As a whole, viewers are faced with a visually compelling scene marked by festive energy and striking attention to detail in showcasing the mechanics of each pictured instrument. The instruments and their lively players invite beholders to "hear" the chime and the consonant tones issuing from the organ's pipes in their "mind's ear," so as to cognitively convert the mute fresco into an audiovisual spectacle.

Music was a central element of thirteenth-century court culture.¹²³ The papal court, as Julian Gardner has shown, developed a sincere interest in both the theoretical and performative aspects of music in the years coinciding with Stefano Conti's curial career.¹²⁴ Stefano himself appears to have harbored a distinct fascination for the auditory arts. The best evidence for this is not preserved in archives but rather in the architectural design of his frescoed hall, which was devised to receive sonic events from the Sylvester Chapel on the ground floor. In the downstairs chapel, two shell-shaped marble funnels were installed in the painted decorative border on the south wall (Figure 2.20). These acoustic inlets served to transport the sounds produced in the chapel via embedded terracotta tubes to the great hall on the floor above.¹²⁵ In the hall, two acoustic horns placed either side of the south doorway would emit the full repertoire of sounds generated in the chapel, from liturgical ceremonies and sacred song to the chatter of pilgrims on days when the oratory was open to the public (Figure 2.21). Sound thus physically emanated from the wall on which the representation of music was painted. Viewers studying the image would be standing almost directly in front of the acoustic outlets. Thus, while these beholders might have to recall the sound of an organ from memory, they would at times find themselves embraced by the actual sounds produced by the most common instrument of the period: the human voice. Whenever a group of choristers performed hymns or rhythmic chants in the chapel, their voices would ring acousmatically from the hall's "loudspeakers." Accordingly, the text on Music's scroll, which foregrounds the voice as instrument, was activated by the real sounds of modulated voices carried forth from an unseen



2.20. South wall of Sylvester Chapel, ca. 1244–54, with arrows showing marble inlets for acoustic tubes, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.

location. The contemplation of music as a liberal art therefore assumed not only a cognitive auditory dimension but a real one as well.

Conti's acoustic tubes suggest that the cardinal designed his residence to bring together architectural space, painting, and sound into a thirteenth-century *Gesamtkunstwerk*.¹²⁶ At the same time, the chants of choristers were not the only sonic elements to condition the viewing experiences of Conti's visitors. From its elevated position on a spur of the Celian hill, the great hall was particularly well placed to absorb the complex soundscapes of medieval Rome. The mixed sounds of the city would enter through the hall's multiple windows, two of which opened onto the secondary branch of the *Via Papalis*, which runs directly below the great tower.¹²⁷ Furthermore, the patron and his curial colleagues could step out through the doorway in the north wall onto an external terrace, a type of *chemin de ronde*, which originally circled the tower's exterior.¹²⁸ From this platform, visitors could take in a magnificent view of the Lateran and the Colosseum valley and listen to the sounds radiating from the city's network of streets.

In the soundscape of thirteenth-century Rome, the pealing of bells would have been the most distinctive element to carry across the urban topography. Lofty and colorful bell towers had been constructed throughout the city over the course of the previous century.¹²⁹ By the 1240s, close to one hundred such *campanili* dominated the Roman skyline, and their heavy cast-bronze bells rang



2.21. View of south wall in great hall, ca. 1244–54, with arrows showing location of acoustic outlets (the two indentations were presumably inlaid with marble funnels akin to those still visible in the Sylvester Chapel). Cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

out to structure the daily life of citizens by marking time and calling the faithful to service (Figure 2.22).¹³⁰ Some, like the bells of San Giovanni in Laterano, San Clemente, and Santi Giovanni e Paolo, would be loud and near, while others, such as the bells of Santa Francesca Romana, Santi Cosma e Damiano, and Santa Prassede, were subdued. While the signifying peal of bells regulated the temporal flow of everyday life, the clangorous sounds of trumpets and chants of *Kyrie Eleison* would have announced feast days and other special occasions. The tower's position on the *Via Papalis* placed it on the path of the most important processions that medieval Rome had to offer, from the Easter Monday parade and papal inauguration ceremonies to the increasingly



2.22. View of *campanile* at Santi Giovanni e Paolo, Rome, ca. 1150. Photograph: Courtesy of Giorgio Rodano.

elaborate Assumption Day procession. Rhythmic chanting was a constant accompaniment to the latter feast, which was highlighted by the nighttime journey of the miraculous icon known as the *Acheiropita* along a meandering route from the Lateran to Santa Maria Maggiore.¹³¹ A person standing on the wall walk at Santi Quattro Coronati could not only observe the torch-lit procession as it passed through the street below; they would also have heard the steady pulse of chants long after the crowd was out of view.

Papal inauguration ceremonies were public spectacles of a significantly louder sort. In these multi-day consecration rituals, music was again a key element.¹³² The biographer of Gregory IX (1227–41), the last pope of the thirteenth century to be crowned within the city of Rome, tells of trumpets blowing and clamorous chants of songs both sacred and “*fescennine*” (i.e., folk songs, at times crude) during the pontiff’s public celebrations.¹³³ The splendor culminated in a cavalcade where Gregory, wearing the tiara and mounted on a sumptuously draped horse, traversed the city on his way to the Lateran. Accompanying the pontiff were the college of cardinals, dressed in purple, and the senator and prefect of Rome, who was tasked with leading Gregory’s horse by its bridle.¹³⁴ The concluding scene of the frescoes commissioned by Stefano Conti for the Quattro Coronati’s Sylvester Chapel evokes some of the jubilant atmosphere and political symbolism of such papal cavalcades. Here, the mural’s narration of the interactions between Pope Sylvester and Emperor Constantine culminates in a panel that corresponds quite closely to the description relayed by Gregory’s biographer. The fresco shows a deferential Constantine who has surrendered his sword in order to humbly escort the mounted Sylvester through the streets of Rome en route to the pontiff’s new residence at the Lateran (see [Figure 1.28](#)).¹³⁵

The “period ears” of thirteenth-century courtiers were accordingly shaped by a variety of sonic impressions that included the polyphonic chants of public celebrations, the regular chime of Rome’s multitudinous bells, and the familiar songs of the *schola cantorum*.¹³⁶ Such events were all examples of *musica practica*, which could be defined as the human production of deliberate and meaningful soundscapes. The representation of music in the great hall places a particularly strong emphasis on this performative aspect of music. The artists responsible for the painting took care to depict the musical instruments in use, and so we see the schoolboys as they play the organ, as well as the dancing Music as she rings the bells of her chime. Yet the painting is not without references to music’s theoretical significance, or *musica theorica*. In their own ways, the splendidly represented organ, the scroll held by Music, and the seated philosopher all invite an understanding of music as a constituent element of the four mathematical arts, or quadrivium. Boethius had summarized the interrelated nature of the four subdivisions as follows: “Geometry speculates about fixed magnitude, while astronomy pursues knowledge of movable magnitude; arithmetic is the authority concerning quantity that is discrete in itself, whereas music is clearly expert concerning quantities related to other quantities.”¹³⁷ Put more plainly, the arts of the quadrivium all dealt in one way or another with quantities, and music was principally the knowledge of ratios – that is, numbers in relation to other numbers.¹³⁸ The organ depicted in Conti’s mural makes the principle of ratios visually comprehensible, for the increasing scale of the instrument’s seven pipes *shows* viewers that pleasing – or consonant – sounds

occur at regular intervals. Organs, as Margot Fassler points out, enabled medieval churchgoers to simultaneously see and hear the proportions of music.¹³⁹ In similar fashion, the painted organ at Santi Quattro Coronati, with its incrementally scaled pipes and schoolboy musicians, displayed *musica practica* and *musica theorica* as a single visual emblem.

This twofold understanding is further developed by Music's parchment, which echoes statements by Boethius, Guido of Arezzo, and Augustine to define music as the science of modulation and the motion of the voice. On the one hand, the formulation asserts that music is an art form that turns the body into an instrument in the development of skillful modulation.¹⁴⁰ On the other hand, by referring to the voice's "motion" (*motus*), the scroll would have reminded viewers that music was structurally aligned with astronomy, the study of the movable spheres, which were understood to produce their own form of celestial music.¹⁴¹ The enthroned philosopher likewise serves a dual role as musical performer and spokesperson for the antique heritage of music's intellectual prestige.¹⁴² Viewers speculating about the identity of this unnamed theoretician could select from a small list of potential candidates. They included Boethius, whose *De musica* was revered as an authoritative text on music theory, along with the Old Testament figure Tubal, who, according to Genesis 4:21–22, invented music. However, some viewers' speculations might have gravitated toward the Greek philosopher Pythagoras, who, according to a well-known legend, discovered the underlying principles of harmonic sound in a blacksmith's workshop.

The variety of potential candidates and the complexity of music theory's textual transmission were captured by the illuminator of a twelfth-century manuscript now in Cambridge (Figure 2.23).¹⁴³ In the top right compartment of this illuminated page, a youthful Pythagoras displays a scale balanced by four hammers while a discarded hammer lies at his feet. In the adjacent compartment, Boethius sits on a claw-footed chair playing a monochord box inscribed A, B, C, D, E in reference to the musical alphabet. The two figures and their attributes evoke the legend first recounted by Nicomachus and later retold by Boethius about how Pythagoras discovered the system of numerical ratios hidden within music. According to this story, the Greek philosopher was out for a walk when he noticed the distinctive clangs produced by five hammers as they were struck against an anvil in a nearby forge.¹⁴⁴ Stopping to listen more carefully, Pythagoras noticed that four of the hammers were somehow in tune with one another, even though they produced different sounds. There was also a fifth hammer, which did not resonate with the others. Discarding the discordant hammer, Pythagoras picked up the four harmonious ones and quickly determined that their clangs related to their mass rather than the force of the blacksmith's blows. Measuring their weights, he found that the mass of the four consonant hammers could be expressed by the numbers 12, 9, 8, and 6, and that their ratios – the number of times one value contains or is



2.23. Boethius, Pythagoras, Plato, and Nicomachus as representatives of music. From manuscript containing Boethius's *De musica* and *De arithmetica*. Cambridge University Library, Ms. li 3.12, fol. 61v. Photograph: Reproduced by kind permission of the Syndics of Cambridge University Library.

contained within the other – could be expressed as 2:1, 3:2, 4:3, and 9:8. Thus emerged for the Greek philosopher a simple arithmetical system for understanding why different tones, produced simultaneously, could sound either pleasing or displeasing to the ear. Returning home, Pythagoras confirmed his

emerging theory of music by experimenting with pipes and strings of differing lengths, leading to the development of a musical instrument that consisted of a single string stretched over a hollow box: the monochord.¹⁴⁵

The Cambridge illumination, which occurs in a codex containing Boethius's *De musica* and *De arithmetica*, expands on this origin tale by including the additional figures of Nicomachus and Plato in the two lower compartments. On the left, Plato displays a codex labeled "MUSICA" while sitting on a globe, an allusion to music's cosmological dimension. The mathematician Nicomachus stands in the lower right holding another codex labeled "MUSICA" to establish a link between music and his primary domain of arithmetic.¹⁴⁶ As a whole, this gallery of famed philosophers outlines a complex image of *musica theorica*, indicating its origin in an act of attentive listening to the sensible world, its practical application in the making of harmonic sounds with bells and strings, and its development as a mathematical discipline. Furthermore, all members of this scientific quartet are depicted as medieval noblemen, which serves to highlight the historical transmission of a theoretically sophisticated form of knowledge from Plato and Pythagoras via Nicomachus and Boethius to the world of twelfth-century Canterbury, where the manuscript was produced.¹⁴⁷

The educated beholders of Stefano Conti's frescoes were likely familiar with Boethius's story about Pythagoras. They were, perhaps, equally aware of a rival account that circulated in a bestselling textbook known as *Historia Scholastica*, written around 1170 by the chancellor of Notre Dame, Petrus Comestor.¹⁴⁸ In the latter work, the discovery of harmony was reassigned to Tubal, who in the Old Testament had been described as "the father of all those who play the harp and flute." According to Comestor, Tubal had been visiting the forge of his brother, Tubalcain, when, "pleased with the sound of hammers, [he] deduced from their weight the proportions and harmonies produced, a discovery that the Greeks attributed without basis to Pythagoras."¹⁴⁹ Comestor thus sought to explicitly dissociate the discovery of music's underlying numerical logic from pagans.¹⁵⁰ He furthermore expanded on this theme by reiterating the early medieval claim that all human sciences had been invented in the period before the Deluge. In Comestor's version of the story, it was Tubal who had inscribed the world's knowledge onto the stone and brick pillars whose durable materials preserved this learning for future generations.¹⁵¹ The two columns of knowledge were at times included in the iconography of Tubal when he emerged as the standard representative of music in fourteenth-century Italian art.¹⁵² Examples include a luxury codex made for Robert of Anjou in the 1330s, which features a squat and bearded Tubal seated at the feet of Music and flanked by one brick and one stone column (Figure 2.24).¹⁵³ The miniaturized Old Testament figure uses two hammers to "play" his anvil like a



2.24. Music with Tubal (left) and Astrology with Ptolemy (right), ca. 1334–43. Vienna, Österreichische Nationalbibliothek, Cod. Ser. N. 2639, fol. 36r. Photograph: ÖNB Wien Cod. Ser. N. 2639, fol. 36r.

percussion instrument while his guardian Music tunes her *citole* and sounds out the didactic solmization *ut re mi fa so la*.

Though widely disseminated, Comestor's revisionary account of music's origins appears to have had little impact on visual art before the fourteenth



2.25. Personifications of Music (above) and Astronomy (below) accompanied by Atlas (left) and Ptolemy (right), ca. 1250, introductory liberal arts sequence in copy of Petrus Comestor's *Historia Scholastica*. Munich, Bayerische Staatsbibliothek, Clm. 17405, fol. 3r. Photograph: Bayerische Staatsbibliothek München, Clm. 17405, fol. 3r.

century. In the thirteenth-century copy of *Historia Scholastica* from Scheyern, music was the only art not to be accompanied by historical representatives (Figure 2.25).¹⁵⁴ Meanwhile, the roughly contemporaneous artist working in the Aldersbach scriptorium doubled down on Pythagoras as the originator of



2.27. Personification of music with Pythagoras. Munich, Bayerische Staatsbibliothek, Clm 2599, fol. 103r. Photograph: Bayerische Staatsbibliothek München, Clm 2599, fol. 103r.

of the historical transmission of knowledge. The obscured identities of the frescoes' seated philosophers indicate a desire to avoid reducing scientific developments to singular moments of origin – akin, perhaps, to the way in which the Cambridge illumination disperses music's disciplinary formation across four progenitors. In the manuscript, the Pythagorean discovery of harmony is displayed as one episode of a more complex development with contributions from several participants. The frescoed image of music in the south bay encouraged its viewers to engage in a comparable form of thinking around the art's complex journey thorough intellectual history. Such open-ended reflection on music's multifaceted formation took place in a space suffused with song emanating from the walls. With the harmonious voices of choristers filling the hall, the contemplation of music as a science with antique origins and a tangled medieval history was combined with the real-time experience of music's practical and aesthetic dimensions. This multimedia experience extended to the contemplation of the liberal arts cycle as a whole. The visual and spatial contemplation of worldly learning would have been

permeated by musical harmonies, so as to evoke the encyclopedist Isidore of Seville's comment that "without music, no other discipline can be perfected, for nothing is without music."¹⁵⁷

NOTES

- 1 Blume, "Die Aula Gotica von Santi Quattro Coronati," 225.
- 2 The letters that still remain are A, B, C, and D on the left page, and K and M on the right page. For a detailed study of the inscriptions in the painted hall, see Claudio Novello, "Santi Quattro Coronati – Sala Gotica: L'apparato epigrafico," in Draghi, *Gli affreschi*, CD-ROM appendix, 1–93. My transcriptions in this chapter are based on those of Novello. Like Novello, I use brackets [/] to indicate lost letters and parentheses (/) to indicate abbreviations. See Novello, "L'apparato epigrafico," 21.
- 3 Hugh of Saint Victor, *The Didascalicon of Hugh of Saint Victor: A Medieval Guide to the Arts. Translated from the Latin with introduction and commentary by Jerome Taylor* (New York: Columbia University Press, 1991), 59.
- 4 PRINCIPIVM ME(N)SVRE PV(N)TVS VOCAT. The inscription is possibly a paraphrase of Isidore of Seville's *Etymologies* (III, 12:7): "The first figure of this art is the point [punctus], which has no parts." (*Prima autem figura huius artis punctus est, cuius pars nulla est.*) Isidore of Seville, *The Etymologies of Isidore of Seville*, ed. Stephen A. Barney (Cambridge and New York: Cambridge University Press, 2006), 94.
- 5 The inscription is partly lost; what remains reads: ... +++RE SPATIA [DISTI]NGVIT GEOME(TRIA). Novello, "L'apparato epigrafico," 22–3.
- 6 The scroll in *Musica's* left hand asserts that music is the science of modulation and the movement of the voice: MVSICA E(ST) MOT(VS) VOCVM SCIE(N)TIA MODVLA(N)DI. The formulation is apparently a paraphrase of statements found in the writings of Boethius, Augustine, and possibly Guido of Arezzo. See Novello, "L'apparato epigrafico," 80.
- 7 The inscription on the scroll held by the representative of music is only partly legible. What remains reads: MVSIC[A- - -C?]ANIT ODA(S?) RE+[- - -]+. As Novello notes, the term CANIT refers to the activity of singing, the term ODAS to sacred music (or if one hypothesizes ODAS it would refer to the auditory reception of that which is sung). Finally, if one hypothesizes REBOAT or REBOANT for the last word, it would refer to the sound produced by musical instruments. See Novello, "L'apparato epigrafico," 24–5.
- 8 The damage to this pictorial field has left several interpretive problems. If Arithmetic was composed according to the same principle as Music in the other half of the lunette, there would have been a female personification of Arithmetic standing to the right of the enthroned figure. However, it is not entirely clear that there is sufficient space for a third figure beneath the circular window: That is, the image may have been composed as a two-figure scene. Additionally, it is no longer possible to discern whether the enthroned teacher is a personification of Arithmetic or a scholarly exponent of the art. Indeed, close analysis of the fragmented evidence shows that the enthroned teacher incorporates aspects of both male and female figures elsewhere in the cycle. Thus, the scroll draped across the lap corresponds to that exhibited by the male philosopher in Geometry, while the extended arm is rendered in a manner comparable to the hand of Music ringing the bells. Also, aspects of the figure's white tunic and dark shoes are seen again in the tunic of Astronomy personified, the shoes of Geometry personified, and the shoes of the male representative of Geometry.
- 9 The inscription on the scroll held by the seated figure is almost entirely lost. The two truncated words NVM and VN might be reconstructed as NVMERVS, referencing the activity of numeration, and VNVM, referencing the number one. See Novello, "L'apparato epigrafico," 26.

- 10 [S]CIENTIA PLA[N]ETARV(M) (ET) CETERORVM ASSTORV(M) (Science of the planets and the other celestial bodies). Novello, "L'apparato epigrafico," 27.
- 11 This correlation had been highlighted by Alan of Lille in *Anticlaudianus* and was expounded by Dante in his *Convivio* (2.14). See Giuseppe Mazzotta, *Dante's Vision and the Circle of Knowledge* (Princeton, NJ: Princeton University Press, 1993), 45–7.
- 12 Muriel Bovey, *Disciplinae cyclica: l'organisation du savoir dans l'oeuvre de Martianus Capella* (Trieste: Edizioni Università di Trieste, 2003).
- 13 Williams, *The Secret of Secrets*, 115.
- 14 Peter Moraw, "Careers of Graduates," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 249; Williams, *The Secret of Secrets*, 115. Williams argues that "the MA was almost a prerequisite for advancement" to the College of Cardinals.
- 15 Eight out of ten cardinals had master's degrees, whereas the remaining two – Giacomo Pecorara and Riccardo Annibaldi – were of unknown educational background. See Ovidio Capitani, "Gregorio IX," in *Dizionario biografico degli italiani* (Rome: Istituto della Enciclopedia Italiana, 2003), 59, 166–78: "confermò la prassi di affidare il titolo cardinalizio a chi avesse una formazione universitaria, a Parigi o a Bologna. Sui dieci cardinali da lui creati, solo di due – Giacomo Pecorara e Riccardo Annibaldi – non si sa se fossero insigniti del grado di magister."
- 16 Williams, *The Secret of Secrets*, 115; Agostino Paravicini Bagliani, *Cardinali di curia e famiglie cardinalizie dal 1227 al 1254* (Padova: Antenore, 1972); see also Classen, "Rom und Paris," 127–69.
- 17 Rainer Christoph Schwinger, "Student Education, Student Life," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 195–243, esp. 223. As Schwinger points out, the behavior of students at the University of Paris in the first half of the thirteenth century led Cardinal Jacques de Vitry to declare the institution "an international parliament of sin, a rendezvous for vice-ridden souls the world over."
- 18 Achille Luchaire, "A Realist Ascends the Papal Throne," in *Innocent III: Vicar of Christ Or Lord of the World?*, ed. James M. Powell (Washington, DC: Catholic University of America Press, 1994), 19–36, at 21; John C. Moore, *Pope Innocent III (1160/61–1216): To Root Up and Plant* (Notre Dame, IN: University of Notre Dame Press, 2009), 6–7.
- 19 P. Osmund Lewry, "Papal Ideals and the University of Paris, 1170–1303," in *The Religious Roles of the Papacy: Ideals and Realities, 1150–1300*, ed. Christopher Ryan (Toronto: Pontifical Institute of Medieval Studies, 1989), 363–88.
- 20 Williams, *The Secret of Secrets*, 117.
- 21 Specifically, the founding and financing of the university was imposed on the Count of Toulouse as part of the peace treaty in the aftermath of the Albigensian war. See Walter Rüegg, "Themes," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 3–34, at 16. Yet, as Jaques Verger points out, "instead of the religious, proselytizing university that had first been planned, there developed a predominantly juridical university, which was more in harmony with the southerners' expectations." Jacques Verger, "Patterns," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 35–76, at 54.
- 22 Power, *Roger Bacon and the Defense of Christendom*, esp. 29–83.
- 23 Gordon Leff, "The Trivium and the Three Philosophies," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 307–36, at 319. Leff summarizes the developments as follows: "What Aristotle did was to provide a common theoretical framework in a common vocabulary, the notion of a science as an organized body of knowledge with its own defining principles and conclusions, and a comprehensive natural philosophy and cosmology based upon a metaphysics of form and matter, producing a qualitative non-mathematical conception of being, which, to the detriment of the subsequent development of the natural sciences, displaced the predominantly Platonist Timaeon cosmology of the twelfth century based upon quantity."

- 24 Innocent was known to enjoy the company and conversations of one of Aristotle's Latin translators, David of Dinant. David was in the entourage of Innocent when his work *Quatemuli* was condemned by the Parisian Synod of 1210. See Enzo Maccagnolo, "David of Dinant and the Beginnings of Aristotelianism in Paris," in *A History of Twelfth-Century Western Philosophy*, ed. Peter Dronke (New York and Cambridge: Cambridge University Press, 1992), 429–40.
- 25 Steven J. Williams, "Repenser l'intention et l'effet des décrets de 1231 du pape Grégoire IX sur l'étude des libri naturales d'Aristote à l'Université de Paris," in *L'enseignement de la philosophie au XIIIe siècle: Autour du "Guide de l'étudiant" du ms. Ripoll 109*, ed. Claude Laffeur (Turnhout: Brepols, 1997), 139–63.
- 26 Gregory observed that the Aristotelian *Libri naturales* "contain [both] useful and useless things." "Lest the useful be vitiated by the useless," a special commission was charged with examining them and removing all that was offensive so that they "may be studied without hesitation." See Williams, *The Secret of Secrets*, 121; Williams, "Repenser l'intention," 131–66.
- 27 Quoted in Williams, *The Secret of Secrets*, 118.
- 28 Maleczek, "Stefano Conti," 475–8.
- 29 On Innocent's educational background, see Kenneth Pennington, "The Legal Education of Pope Innocent III," *Bulletin of Medieval Canon Law* 70 (1974): 70–7; Edward Peters, "Lotario di Conti di Segni Becomes Pope Innocent III: The Man and the Pope," in *Pope Innocent III and His World*, ed. John Moore (Aldershot and Brookfield, VT: Ashgate, 1999), 3–24. On the education of Gregory, see "Gregory IX," *A Dictionary of Popes*, eds. J. N. D. Kelly and Michael J. Walsh, 2nd edition (Oxford: Oxford University Press, 2010), 191–2.
- 30 Draghi, *Gli affreschi*, 19–20.
- 31 For example, when Stefano's father, Riccardo Conti, secured the title of Count of Sora, he did so with lands controversially seized from the young Frederick II. The emperor would later claim these territories back, resulting in a lengthy legal dispute, which was handled by Stefano Conti. See Dykmans, "Riccardo Conti," 466–8.
- 32 As, for example, in 1219, when Honorius III moved to diminish imperial influence over the faculty of law at Bologna by effectively placing the university under papal control. See Antonio García y García, "The Faculties of Law," in *A History of the University in Europe. Volume 1*, ed. de Ridder-Symonens, 388–408, at 388.
- 33 Herzman and Stephany, "Dante and the Frescoes at Santi Quattro Coronati," 106.
- 34 For an overview, see William H. Stahl, *Roman Science: Origins, Development, and Influence to the Later Middle Ages* (Madison: University of Wisconsin Press, 1962); entry on "Liberal Arts," in *The Classical Tradition*, eds. Anthony Grafton, Glenn W. Most, and Salvatore Settis (Cambridge, MA and London: Harvard University Press, 2010), 523–9.
- 35 A fundamental study of the *artes liberales* in medieval culture, with a particular focus on their representation in the visual arts, is Michael Stolz, *Artes-liberales-Zyklen: Formationen des Wissens im Mittelalter*, 2 vols. (Tübingen and Basel: Francke Verlag, 2004). See also the collection of essays in David L. Wagner, ed. *The Seven Liberal Arts in the Middle Ages* (Bloomington: Indiana University Press, 1983).
- 36 Augustine, *On Christian Doctrine*, 2.40.60.
- 37 Jean Leclercq, *The Love of Learning and Desire for God*, trans. Catharine Misrahi (New York: Fordham University Press, 1982), 19–21.
- 38 Cora E. Lutz, "Remigius' Ideas on the Classification of the Liberal Arts," *Traditio* 12 (1956): 65–86, at 82; see also Rita Copeland, *Rhetoric, Hermeneutics, and Translation in the Middle Ages: Academic Traditions and Vernacular Texts* (Cambridge and New York: Cambridge University Press, 1991), 71–5.
- 39 Michael Stolz, "Faith and the Intellectuals, II," in *The Cambridge History of Christianity. Volume 4: Christianity in Western Europe, c. 1100–1500*, eds. Miri Rubin and Walter Simons (New York: Cambridge University Press, 2009), 394–404, at 399; Richard William

- Southern, *Scholastic Humanism and the Unification of Europe. Volume 1: Foundations* (Oxford and Cambridge, MA: Wiley-Blackwell, 1995), 58–101.
- 40 William H. Stahl, *Martianus Capella and the Seven Liberal Arts. Volume II: The Marriage of Philology and Mercury*, trans. William Harris Stahl and Richard Johnson with E. L. Burge (New York: Columbia University Press, 1977).
- 41 Stahl, *Martianus Capella and the Seven Liberal Arts*, 65, 107, 218.
- 42 For the medieval reception of *The Marriage*, see Andrew Hicks, “Martianus Capella and the Liberal Arts,” in *The Oxford Handbook of Medieval Latin Literature*, eds. Ralph Hexter and David Townsend (Oxford University Press, 2012), 307–34; Bovey, *Disciplinae cyclicae*.
- 43 Adolf Katzenellenbogen, “The Representation of the Seven Liberal Arts,” in *Twelfth-Century Europe and the Foundations of Modern Society*, ed. Marshall Clagett (Madison: University of Wisconsin Press, 1961), 39–55, at 41.
- 44 Bamberg, Staatsbibliothek Bamberg Msc. Class. 5, fol. 9v.
- 45 For the manuscript, see Laura Cochrane, “Secular Learning and Sacred Purpose in a Carolingian Copy of Boethius’s *De institutione arithmetica* (Bamberg, Staatsbibliothek, Msc. Class. 5),” *Peregrinations: Journal of Medieval Art and Architecture* 5:1 (2015): 1–35.
- 46 Steven J. Livesey, “Quadrivium,” in *Medieval Science, Technology, and Medicine*, ed. Glick, 431–2.
- 47 *De institutione arithmetica*, I.1. See Stolz, *Artes-liberales-Zyklen*, 1:12.
- 48 Theodulph of Orleans, “De septem liberalibus artibus in quadam pictura depictis,” no. 46 of “Theodulphi Carmina” (ed. Traube, pp. 544–7). An English translation is found in Nikolai Alexandrenko, “The Poetry of Theodulf of Orleans: A Translation and Critical Study” (PhD diss., Tulane University, 1970), 261–6.
- 49 Carruthers, *The Craft of Thought*, 209–13.
- 50 *Ibid.*, 209–13.
- 51 The eloquent detail of Theodulf’s description, combined with the author’s reputation as a patron of the arts, has led scholars to believe that the poem describes a lost mural program that once decorated the living quarters of his bishop’s palace at Germigny-des-Prés. It is certainly possible that comparable murals were part of the pictorial decorations of Carolingian palaces and monasteries, but the text is most likely a mnemonic tree diagram. However, Theodulf is intentionally ambivalent about the nature of his picture; by presenting his composition as *in pictura depictis*, he suggests that the knowledge content of his poem can be most effectively transmitted in the form of an image.
- 52 Laura Cleaver, *Education in Twelfth-Century Art and Architecture: Images of Learning in Europe, c. 1100–1220* (Woodbridge: Boydell Press, 2012).
- 53 Laura Cleaver, “The Liberal Arts in Sculpture and Metalwork,” *Immediations: The Research Journal of the Courtauld Institute* 4 (2007): 57–75.
- 54 Joyner, *Painting the Hortus Deliciarum*, 69–76.
- 55 *Ibid.*, 72. The inscription at the bottom of the page reads “Isti inmundis spiritibus inspirati scribum artem magicam et poetriam id est fabulosa commenta.”
- 56 Esmeijer, *Divina Quaternitas*, 35.
- 57 Louis Grodecki and Catherine Brisac, *Gothic Stained Glass, 1200–1300* (Ithaca, NY: Cornell University Press, 1985); Claudine Lautier, “Les vitraux du chevet de la cathédrale de Laon: Première approche,” *Österreichische Zeitschrift für Kunst und Denkmalpflege* 54:3/4 (2000): 257–64.
- 58 Alan of Lille, *Anticlaudianus; or The Good and Perfect Man*, trans. Sheridan (Toronto: Pontifical Institute of Mediaeval Studies, 1973), 80.
- 59 Hugh of Saint Victor quoted in Max Seidel, *Father and Son: Nicola and Giovanni Pisano*, 2 vols. (Munich: Hirmer, 2012), 1:176. Seidel draws on these passages from Alan and Hugh to elucidate the calculated effort that Nicola Pisano made to show the arts as an “indissoluble group” on the Siena pulpit. On the sculpted base, the seven arts and philosophy not only resemble one another closely but are physically intertwined through the folds of their garments, which are heaped together as though constituting a single fabric.

- 60 Michael Evans, "Allegorical Women and Practical Men: The Iconography of the *Artes* Reconsidered," in *Medieval Women*, ed. Derek Baker (Oxford: Blackwell, 1978), 305–30.
- 61 London, British Library, Ms. Add. 30024, f. 1v. The codex is dated to ca. 1260–99.
- 62 Brigitte Roux, *Mondes en miniatures: L'iconographie du Livre du trésor de Brunetto Latini* (Paris: Librairie Droz, 2009), 152–8. The left column shows, from top to bottom: logic, canon law, medicine, civil law, harp playing, scribing, and painting; the right column shows, from top to bottom: necromancy, alchemy, agriculture, money lending, weaving, carpentry, and smithing.
- 63 Ernst H. Gombrich, *Symbolic Images: Studies in the Art of the Renaissance II* (Chicago: University of Chicago Press, 1972), 125.
- 64 London, Victoria and Albert Museum, 7955: 2–1862, dated to ca. 1190–1200. The box was designed to hold writing implements and includes other unusual motifs: a representation of *Natura* suckling *Sapientia*; a representation of Dialectic with an arrow emerging from her mouth; and Astronomy, who sits with her back turned to the viewer. See Cleaver, "The Liberal Arts in Sculpture and Metalwork," 70–3.
- 65 For the inscription, see [note 3](#).
- 66 For a summary of the availability of Archimedes's writings and ideas in the medieval period, see Richard Lorch, "Archimedes," in *Medieval Science, Technology and Medicine*, ed. Glick, 41–2. Numerous Latin translations and editions of the *Elements* were produced in the twelfth and thirteenth centuries. For a summary of its translation history, and of the status of Euclid in the medieval period, see Sonja Brentjes, "Euclid," in *Medieval Science, Technology and Medicine*, ed. Glick, 164–7.
- 67 According to Cassiodorus, Boethius had translated parts of Euclid's *Elements*, but this text does not appear to have been widely circulated. See David Pingree, "Boethius' Geometry and Astronomy: The *De Institutione Arithmetica* and *De Institutione Musica*," in *Boethius: His Life, Thought and Influence*, ed. Margaret Gibson (Oxford: Blackwell, 1981), 155–61.
- 68 Given the cycle's relatively poor state of preservation, it is difficult to be absolutely certain about the absence of identifying inscriptions for the seated philosophers. The best preserved of these figures – those in the images of Grammar and Music – show no discernible traces of labels. One possible exception is the seated figure in the representation of music, where a white fragment seen below the raised hand of *Musica* could be understood as the remnant of an inscription. The shape of the white line, however, does not correspond to parts of characters seen elsewhere in the painted hall.
- 69 Conrad Rudolph, *The Mystic Ark: Hugh of Saint Victor, Art, and Thought in the Twelfth Century* (New York: Cambridge University Press, 2014), 33–41.
- 70 Marie-Dominique Chenu, *Nature, Man, and Society in the Twelfth Century: Essays on New Theological Perspectives in the Latin West*, trans. Jerome Taylor and Lester K. Little (Chicago: University of Chicago Press, 1968), 49–98; Joseph Ziegler, "Faith and the Intellectuals I," in *The Cambridge History of Christianity. Volume 4*, eds. Rubin and Simons, 372–93.
- 71 Albertus Magnus quoted in Nancy G. Siraisi, *Medicine and the Italian Universities, 1250–1600* (Leiden and Boston, MA: Brill, 2001), 13.
- 72 Chicago, Newberry Library, Ms. F9, fol. 65. See Michael Masi, "A Newberry Diagram of the Liberal Arts," *Gesta* 11:2 (1972): 52–6.
- 73 Munich, Bayerische Staatsbibliothek, Ms. CLM 2599. Masi suggests that the Admont diagram served as the model for the liberal arts sequence in the Aldersbach manuscript and pointed to the relatively close geographical distance between the two monasteries. See Masi, "A Newberry Diagram," 53–4. Joyner discusses the two manuscripts in relation to Herrad of Landsberg's related liberal arts diagram in the *Hortus Deliciarum*. See Joyner, *Painting the Hortus Deliciarum*, 72–3.
- 74 The Latin inscription reads "Rethorica: Virgo in dextra gladium strictum; in sinistra hunc versum: artem disce meam qui vis bene dicere causam. Tullius: Cui iuvenis oppositus, eundem versum dextra; in sinistra stralam erectam tenet." For this and the other texts featured in the diagram, see Masi, "A Newberry Diagram," 55.

- 75 As Masi points out, the relatively close geographical origins of the two manuscripts is suggestive. See Masi, "A Newberry Diagram," 53. The Newberry manuscript was made at the Benedictine monastery at Admont (Austria), while the Munich manuscript was produced about 125 miles away at a Cistercian monastery in Aldersbach.
- 76 For the Aldersbacher drawings, see Elisabeth Klemm, "Artes liberales und antike Autoren in der Aldersbacher Sammelhandschrift Clm 2599," *Zeitschrift für Kunstgeschichte* 41 (1978): 1–15.
- 77 The complete set of authors, displayed in pairs across folios 107r–111r, are Statius, Terence, Varro, Plautus, Virgil, Lucan, Horace, Ovid, Ennius, Persius, Pliny, Macrobius, Cicero, Martianus Capella, Bias, Pittacus, Cleobulus, Periander, Solon, Chilo, and Anacharsis. Also included are Boethius in prison consoled by Philosophy (fol. 106v), and a rendering of Aesop's fable of the Wolf and the Crane (fol. 111r).
- 78 Lutz, "Remigius' Ideas," 65.
- 79 Isidore of Seville, *The Etymologies*, 69.
- 80 *Ibid.*, 89.
- 81 Munich, Bayerische Staatsbibliothek, Ms. CLM 2599, fol. 106.
- 82 Cassiodorus Senator, *Introduction to Divine and Human Readings*, trans. Leslie Webber Jones (New York: Columbia University Press, 1946), 198.
- 83 Munich, Bayerische Staatsbibliothek, Clm 17405, fols. 3r–4v.
- 84 Mark Clark, *The Making of the Historia Scholastica, 1150–1200* (Toronto: Pontifical Institute of Mediaeval Studies, 2015).
- 85 Evans suggested that the illuminations were derived from the pictorial program of a vertically stacked stained glass window, in which Music with no exponent would have been placed in the ogive at the apex. See Evans, "Allegorical Women," 313.
- 86 For Thierry and the School of Chartres, see Raymond Klibansky, "The School of Chartres," in *Twelfth-Century Europe and the Foundations of Modern Society*, ed. Marshall Clagett (Madison: University of Wisconsin Press, 1961), 3–14; Richard William Southern, *Scholastic Humanism and the Unification of Europe*, 2 vols. (Oxford and Cambridge, MA: Wiley-Blackwell, 1995), 1:61–87; Peter Dronke, "Thierry of Chartres," in *A History of Twelfth-Century Western Philosophy*, ed. Dronke, 358–85; Édouard Jeuneau, *Rethinking the School of Chartres* (Toronto: University of Toronto Press, 2009), 65–76.
- 87 For the contents of the *Heptateucon*, see Gillian Rosemary Evans, "The Uncompleted 'Heptateuch' of Thierry of Chartres," *History of Universities* 3 (1983): 1–13.
- 88 Adolf Katzenellenbogen, *The Sculptural Programs of Chartres Cathedral* (Baltimore: Johns Hopkins Press, 1959), 15; Marina Warner, *Monuments and Maidens: The Allegory of the Female Form* (New York: Atheneum, 1985), 180; Margot Fassler, *The Virgin of Chartres: Making History through Liturgy and the Arts* (New Haven, CT: Yale University Press, 2010).
- 89 *Heptateucon* was also the name used to describe the first seven books of the Bible, leading some to refer to Thierry's opus as the "Bible of the Liberal Arts." See Jeuneau, *Rethinking the School of Chartres*, 67.
- 90 Partly for this reason, the philological sciences of the trivium had greater value to Thierry than the arts of the quadrivium. Whereas the mathematical sciences made it possible to quantify one's surrounding reality, the arts of the trivium allowed one to *interpret* this reality and articulate its meaning in a comprehensible language. As such, Thierry effectively reversed the classical valuation of the liberal arts. See Michael C. Weber, "Thierry of Chartres," in *Medieval Science, Technology and Medicine*, ed. Glick, 476.
- 91 Katzenellenbogen, *The Sculptural Programs of Chartres Cathedral*, 15.
- 92 Considered in its entirety, Chartres' west façade expands this notion of the unity of divine and human knowledge by fusing biblical narratives and theological emblems with the encyclopedic themes of the labors of the months, the zodiacal signs, and the *artes liberales*.
- 93 Isidore's discussions of grammar and arithmetic articulated the two arts' foundational roles. For example, he describes arithmetic as "the first among the mathematical disciplines, as this discipline relies on no other for its existence. However, music, geometry, and astronomy,

- which follow arithmetic, require its support in order to exist and hold their place.” See Isidore of Seville, *The Etymologies*, 39, 89.
- 94 The signification density of the scene *may* be linked to an architectural remodeling and repainting that, according to Andreina Draghi and Francesca Matera, occurred in the second half of the thirteenth century. According to this hypothesis, Conti’s hall was originally outfitted with a fireplace and chimney that were embedded in the west wall. If so, the original fresco program would have wrapped around the chimney hood, which would have created a small amount of additional wall surface to accommodate paintings. Thus, the original program might have included three separate scenes or figures representing the three arts of the trivium (grammar, rhetoric, and logic). After the removal of the chimney, the artists and planners in charge of the restoration were working with a reduced surface area and so decided to reconfigure the three linguistic arts of the trivium as two personifications. It should be emphasized that in the current state of research, we do not have sufficient information to prove or disprove this hypothesis. For Matera’s technical analysis of the walls in the great hall, see Francesca Matera, “Osservazioni sul supporto murario e sul suo stato di conservazione,” in Draghi, *Gli affreschi*, 363–90, esp. 366, 379, and note 38.
- 95 Bernard’s expansive view of grammar was reported by John of Salisbury. See Jeaneau, *Rethinking the School of Chartres*, 40.
- 96 More specifically, in Hugh of Saint Victor’s classification of the sciences, dialectic and rhetoric form one of two subdivisions of logic, with grammar constituting the second subdivision. See Hugh of Saint Victor, *The Didascalicon of Hugh of Saint Victor*, 59.
- 97 Isidore attributes the phrase to Varro. See Isidore of Seville, *The Etymologies*, 79.
- 98 Alexandrenko, “The Poetry of Theodulf of Orleans,” 263.
- 99 Another example is Nicola Pisano’s Siena pulpit, where Philosophy’s richly decorated dress sets her apart from the seven sister arts. See the discussion in Seidel, *Father and Son*, 192–5.
- 100 John White, “The Reconstruction of Nicola Pisano’s Perugia Fountain,” *Journal of the Warburg and Courtauld Institutes* 33 (1970): 70–83.
- 101 Jeffrey F. Huntsman, “Grammar,” in *The Seven Liberal Arts in the Middle Ages*, ed. David L. Wagner (Bloomington: Indiana University Press, 1986), 58–95, at 59.
- 102 John of Salisbury, *The Metalogicon: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*, trans. With an introduction and notes by Daniel D. McGarry (Philadelphia: Paul Dry Books, 2009), 37; Jeaneau, *Rethinking the School of Chartres*, 42.
- 103 Jeaneau, *Rethinking the School of Chartres*, 42; Jean Jolivet, “Elements pour une etude des rapports entre la grammaire et l’ontologie au Moyen Age,” in *Sprache und Erkenntnis im Mittelalter*, ed. A. Zimmermann (Berlin and New York: Walter de Gruyter, 1981), 135–64.
- 104 Isidore of Seville, *The Etymologies*, 39.
- 105 *Ibid.*, 39. In the Latin edition, the passage reads: “Litterae autem sunt indices rerum, signa verborum, quibus tanta vis est, ut nobis dicta absentium sine voce loquantur. Verba enim per oculos non per aures introducunt. Usus litterarum repertus propter memoriam rerum. Nam ne oblivione fugiant, litteris alligantur. In tanta enim rerum varietate nec disci audiendo poterant omnia, nec memoria contineri.”
- 106 *Ibid.*, 42. “Nomen dictum quasi notamen, quod nobis vocabulo suo res notas efficiat. Nisi enim nomen scieris, cognitio rerum perit.”
- 107 As Mary Franklin-Brown points out, etymology “inserts an additional layer of discourse between words and things: the discourse, authoritative and potentially infinite of the etymologist. This elevated the grammarian, arbitrator of etymology, into a self-declared arbitrator of all knowledge.” See Franklin-Brown, *Reading the World*, 226.
- 108 Ernst Gombrich, for example, asserted: “Abstract nouns in Greek and Latin almost regularly take on feminine gender and so the way is open for the world of ideas being peopled by [female] personified abstractions.” See Gombrich, *Symbolic Images*, 125.
- 109 A rare medieval articulation of this principle comes from a ninth-century glossist who argued that Boethius had imagined Philosophy in the form of a woman “because the word

- was spoken in the feminine gender in Greek and Latin.” See Helen Cooper, “Gender and Personification in *Piers Plowman*,” *Yearbook of Langland Studies* 5 (1991): 31–48, at 31.
- 110 James J. Paxson, “Personification’s Gender,” *Rhetorica: Journal of the History of Rhetoric* 16:2 (1998): 165–79; James J. Paxson, “Gender Personified, Personification Gendered, and the Body Figuralized in *Piers Plowman*,” *Yearbook of Langland Studies* 12 (1998): 65–96.
- 111 Andrea Denny-Brown, “Personifications Visualized as Women,” in *Women and Gender in Medieval Europe: An Encyclopedia*, ed. Margaret Schaus (New York and London: Routledge, 2006), 647–50.
- 112 James Paxson argues that, while the idea that grammar determines the gender of personifications in medieval art and poetry might seem logical and intuitive, it is actually based on circular reasoning and fails to fully account for this iconographic convention. See Paxson, “Personification’s Gender,” 165–79.
- 113 Jan Ziolkowski, *Alan of Lille’s Grammar of Sex: The Meaning of Grammar to a Twelfth-Century Intellectual* (Cambridge, MA: Medieval Academy of America, 1985), 14–21; Rita Copeland, “The Pardoner’s Body and the Disciplining of Rhetoric,” in *Framing Medieval Bodies*, eds. Sarah Kay and Miri Rubin (Manchester and New York: Manchester University Press, 1994), 138–59.
- 114 The *Anticlaudianus* was widely read as a summary of secular knowledge, and its detailed allegorical descriptions appear to have had a significant impact on thirteenth-century iconography. Max Seidel recently demonstrated the close correspondence between Alan’s portraits and the liberal arts cycle sculpted by Nicola Pisano on the base of his Siena pulpit. See Seidel, *Father and Son*, 175–95.
- 115 Alan of Lille, *Anticlaudianus*, 85.
- 116 *Ibid.*, 106–7.
- 117 See the comment by James Sheridan in Alan of Lille, *Anticlaudianus*, 103, n. 59.
- 118 Compare, for example, to the bust of God in the representation of the microcosm, or the “second vision” of Hildegard of Bingen, ca. 1225–30, in Hildegard of Bingen, *Liber divinorum operum simplicis hominis*. Lucca, Biblioteca governativa, Ms. 1942, fol. 9r.
- 119 The second-century mathematician Nicomachus of Geresia, on the left, was known as the author of the *Introduction to Arithmetic*, which was translated and incorporated into Boethius’s *De arithmetica*. Apuleius, on the right, was believed to be the author of the so-called *Pythagorean Sphere*, a divinatory theory of numbers used to predict whether a sick person would recover from illness or die.
- 120 See Thomas Mathews, *The Clash of Gods: A Reinterpretation of Early Christian Art* (Princeton, NJ: Princeton University Press, 1999), 115–41; Robin M. Jensen, “The Femininity of Christ in Early Christian Iconography,” *Studia Patristica* 29 (1996): 269–82.
- 121 The *citole* is best described as a guitar-like fiddle. A well-preserved thirteenth-century example is found in the British Museum, inv. No. 1963, 1002.1. For a recent collection of essays on this object, see James Robinson, Naomi Speakman, and Kathryn Buehler-McWilliams, eds., *The British Museum Citole: New Perspectives* (London: British Museum Press, 2015).
- 122 MUSICA E(ST) MOT(VS) VOC SCIE(N)TIA MODVLA(N)DI (Music is the science of modulation and the movement of the voice). See Noviello, “L’apparato epigrafico,” 25.
- 123 Ardis Butterfield, “Le tradizioni della canzone cortese medievale,” in *Enciclopedia della musica (The Einaudi Encyclopedia of Music)*, 4 vols. (Turin: Einaudi, 2004), 4:130–51.
- 124 Julian Gardner has shown that a sincere interest in both the theoretical and performative aspects of music is well documented in the years when Stefano Conti served as cardinal, especially during the reign of Pope Gregory IX (1227–41). See Julian Gardner, “The Cardinals’ Music: Musical Interests at the Papal Curia ca. 1200–1304,” *Early Music History* 34 (2015): 97–132, at 98–9; see also Galliano Ciliberti, “Libri di musica e liturgici nelle biblioteche dei cardinali del Duecento,” in *Album amicorum Albert Dunning: In occasione del suo LXV compleanno*, ed. Giacomo Fornari (Turnhout: Brepols, 2002), 71–132.

- 125 On the tubes, see Antonio Muñoz, *Restauro della chiesa e del chiostro dei SS. Quattro Coronati* (Rome: Danesi, 1914).
- 126 Le Pogam, *De la "Cité de Dieu" au "Palais du Pape,"* 637, n. 2. In *De re aedificatoria*, Alberti advised that "a tyrant will find it very useful to have secret listening tubes concealed within the fabric of the wall so as to eavesdrop on the conversations of guests or family." Athanasius Kircher produced several prints showing acoustic tubes embedded in buildings, one of which broadcasts music from an orchestra sitting in a small room onto the exterior of the building. See Leon Battista Alberti, *On the Art of Building in Ten Books*, trans. Joseph Rykwert (Cambridge, MA and London: MIT Press, 1988), 122; Athanasius Kircher, *Phonurgia nova sive conjugium mechanico-physicum artis & naturae paranymta phonosophia concinnatum* (Kempten: Rudolph Dreher, 1673), 143.
- 127 The *Via Papalis* connected the Lateran to the Vatican via the center of Rome. Its westernmost branch roughly corresponds to the modern Via dei Santi Quattro Coronati. On this, see Dey, *The Making of Medieval Rome*, 203–5.
- 128 Barelli, *The Monumental Complex of Santi Quattro Coronati in Rome*, 91; Lia Barelli, "Architetture altoresidenziali a Roma nel XIII secolo: alcune osservazioni," in *Cinte murarie e abitati: Restauro, riuso e valorizzazione*, eds. Roberta Maria Dal Mas and Rossana Mancini (Ariccia: Aracne, 2015), 133–43.
- 129 For a rigorous study of Rome's medieval bell towers, see Ann Priester, "Bell Towers and Building Workshops in Medieval Rome," *Journal of the Society of Architectural Historians* 52:2 (1993): 199–220.
- 130 As Niall Atkinson points out, "bells were arguably the most important urban sounds in the premodern world since they connected inhabitants to the most intimate aspects of their lives: to their religion, their spiritual expression, their past, their dead, their government, their safety, their civic duties, their labor, and their collective celebrations." See Niall Atkinson, *The Noisy Renaissance: Sound, Architecture and Florentine Urban Life* (University Park: Penn State University Press, 2016), 11. For a detailed study of the production of bells in medieval Rome, see Sible de Blaauw, "Campanae supra urbem: sull'uso delle campane nella Roma medievale," *Rivista di Storia della Chiesa in Italia* 47:2 (1993): 367–414.
- 131 On the procession, see Gerhard Wolf, *Salus Populi Romani. Die Geschichte römischer Kultbilder im Mittelalter* (Weinheim: VCH, Acta Humaniora, 1990), 37–73; Enrico Parlato, "La processione di ferragosto e l'acheropita del sancta sanctorum," in *Volto di Cristo*, eds. Giovanni Morello and Gerhard Wolf (Milan: Electa, 2000), 51–2; Enrico Parlato, "Le icone in processione," in *Arte e iconografia a Roma: Da Costantino a Cola di Rienzo*, eds. Maria Andaloro and Serena Romano (Milan: Jaca Book, 2000), 69–93.
- 132 Papal inaugurations were modeled on the Easter Monday procession. According to the account of Cencio Savelli, who ruled as Pope Honorius III (1216–27), the Easter procession traveled along a complicated route from the Lateran to the Vatican and back again. The pope, mounted on a horse, rode in the back of the cavalcade with the papal singers of the *scola cantorum* walking in front of him. The parade appears to have included the entire ecclesiastical hierarchy of cardinals, bishops, abbots, deacons, subdeacons, prefects, and, at the front, the knights of the papal court, whose primary task was to clear the Roman populace out of the way. See Chris Wickham, *Medieval Rome: Stability and Crisis of a City, 900–1150* (Oxford: Oxford University Press, 2015), 327–9.
- 133 Gardner, "The Cardinals' Music," 98–9.
- 134 Paravicini Bagliani, *The Pope's Body*, 34–5.
- 135 On the ritual, see Mary Stroll, *Symbols as Power: The Papacy Following the Investiture Contest* (Leiden: Brill, 1991), 193–208.
- 136 For the term "period ear," see Shai Burstyn, "In Quest of the Period Ear," *Early Music* 25 (1997): 692–701.
- 137 Anicius Manlius Severinus Boethius, *Fundamentals of Music. Translated, with Introduction and Notes by Calvin M. Bower*, ed. Claude Palisca (New Haven, CT and London: Yale University Press, 1989), 54. "Sed immobilis magnitudinis geometria, speculationem tenet,

- mobilis vero scientiam astronomia persequitur, per se vero discretæ quantitatis arithmetica auctor est, ad aliquid vero relatæ musica probatur obtinere peritiam.”
- 138 So, according to Boethius, who appears to have been the first to categorize music in a group of mathematical sciences, all of which deal with quantities: Astronomy and geometry examine continuous quantity (movable and immovable, respectively), while arithmetic and music deal with discrete quantities. Arithmetic is the science of numbers as such, and music is the science of ratios, or the quantitative relation between two numbers.
- 139 Margot Fassler, *Music in the Medieval West: Western Music in Context* (New York and London: W. W. Norton, 2014), 97.
- 140 The first part of the inscription quotes Boethius and Guido of Arezzo, both of whom defined music as “the motion of the voice” (*musica est motus vocum*), while the second part paraphrases Augustine: “music is the science of modulating well” (*musica est scientia bene modulandi*). See Novello, “L’apparato epigrafico,” 80.
- 141 Isidore of Seville, *The Etymologies*, 195: “Indeed, it is said that the universe itself is composed from a certain harmony of sounds, and that the very heavens turn to the modulations of harmony” (*Nam et ipse mundus quadam harmonia sonorum fertur esse compositus, et coelum ipsud sub harmonia modulatione revolvitur*).
- 142 The legible parts of the scroll held by the seated representative can be understood to read: MUSIC[A] . . . [C]ANIT ODA[S?] (or ODAT?) RE . . . See [note 130](#).
- 143 Cambridge University Library, Ms. Li 3.12, fol. 61v. See Katzenellenbogen, “The Representation of the Seven Liberal Arts,” 46–7; Elizabeth Teviotdale, “Music and Pictures in the Middle Ages,” in *Companion to Medieval and Renaissance Music*, eds. Tess Knighton and David Fallows (Berkeley and Los Angeles: University of California Press, 1992), 179–88.
- 144 Boethius, *De musica*, book 1, chapter 10 in Boethius, *Fundamentals of Music*, 17–18. See also Henry Chadwick, *Boethius: The Consolations of Music, Logic, Theology, and Philosophy* (Oxford: Clarendon Press, 1990), 89–91; Daniel Heller-Roazen, *The Fifth Hammer: Pythagoras and the Disharmony of the World* (New York: Zone Books, 2011), 11–17.
- 145 Heller-Roazen, *The Fifth Hammer*, 13.
- 146 Nicomachus was considered an authority on arithmetic. His *Introduction to Arithmetic* makes frequent references to Plato, and Boethius’s *De arithmetica* is essentially a paraphrase of this work. According to Boethius, music and arithmetic were both sciences of numbers – the former of numbers in relation to other numbers, and the latter of numbers per se.
- 147 An additional two compartments below Pythagoras and Boethius show Plato seated on a globe and Nicomachus, each of whom hold up a codex titled MUSICA.
- 148 Maria C. Sherwood Smith, *Studies in the Reception of the Historia Scholastica of Peter Comestor: The Schwarzwälder Predigten, the Weltchronik of Rudolf von Ems, the Scolastica of Jacob van Maerlant and the Historiebijbel van 1360* (Oxford: Society for the Study of Medieval Languages and Literature, 2000).
- 149 Translation quoted from Davide Dalomi, “Jubal, Pythagoras, and the Myth of the Origin of Music,” *Philomusica Online* 16 (2017): 1–42, at 18. For the Latin text, see Jacques-Paul Migne, ed. *Patrologiae Cursus Completus*, Series Latina (Paris: J. P. Migne, 1853), vol. 198, col. 1079.
- 150 Isidore had left the invention of music an open question: “Moses says that Tubal, who was of the stock of Cain before the Flood, was the discoverer of the musical art. But the Greeks say that Pythagoras discovered the elements of this art from the sound of hammers and from the striking of taut strings.” Isidore of Seville, *The Etymologies*, 95.
- 151 Migne, ed. *Patrologiae Cursus Completus*, vol. 198, col. 1079: “ne periret ars inventa, scripsit eam in duabus columnis in qualibet totam . . . una marmorea, altera latericia, quarum altera non diluatur diluvio, altera non solveretur incendio.”
- 152 Tubal is the representative of music in the liberal arts cycles in the chapterhouse frescoes at Santa Maria Novella, Florence, in the frescoes by Serafino de’ Serafini now in the

- Pinacoteca of Ferrara, and in the frescoes in the Cortellieri Chapel in the Paduan Church of the Eremitani, painted by Guisto de' Menabuoi.
- 153 Vienna, Österreichische Nationalbibliothek, Cod. Ser. N. 2639, fol. 36r. For the illuminations, which date to ca. 1334–43, see von Schlosser, “Giusto’s Fresken in Padua,” 19–24; Michael Stolz, “Wege des Wissens: Zur Konventionalität mittelalterlicher Artes-Bildlichkeit,” in *Literatur und Wandmalerei II: Konventionalität und Konversation. Burgdorfer Colloquium 2001*, eds. Eckart Conrad Lutz, Johanna Thali, and René Wetzel (Tübingen: Max Niemeyer Verlag, 2005), 273–302, esp. 294–6. For a detailed commentary on the Vienna codex, see Karl-Georg Pfändtner, *Das Lobgedicht auf König Robert von Anjou. Facsimilekommentar zu Codex Series Nova 2639 der Österreichischen Nationalbibliothek* (Graz: Akademische Druck- und Verlagsanstalt, 2008).
- 154 Neither Tubal nor Pythagoras appear at *Musica*’s side, as though the illuminator preferred not to take sides in the debate; or perhaps they sought to avoid the incongruent presence of an Old Testament figure within the cycle’s pantheon of Greco-Roman philosophers. Another explanation, suggested by Michael Evans, would be that the illuminations derived from the pictorial program of a vertically stacked stained glass window, in which Music would have been placed in the ogive where there was no room for additional figures. See Evans, “Allegorical Women,” 133.
- 155 The codex also includes *De musica* by Johannes Cotto.
- 156 Me duce disparium scitur concordia vocum.
- 157 Isidore of Seville, *The Etymologies*, 95, emphasis added: “Itaque sine Musica nulla disciplina potest esse perfecta, nihil enim sine illa.”

THREE

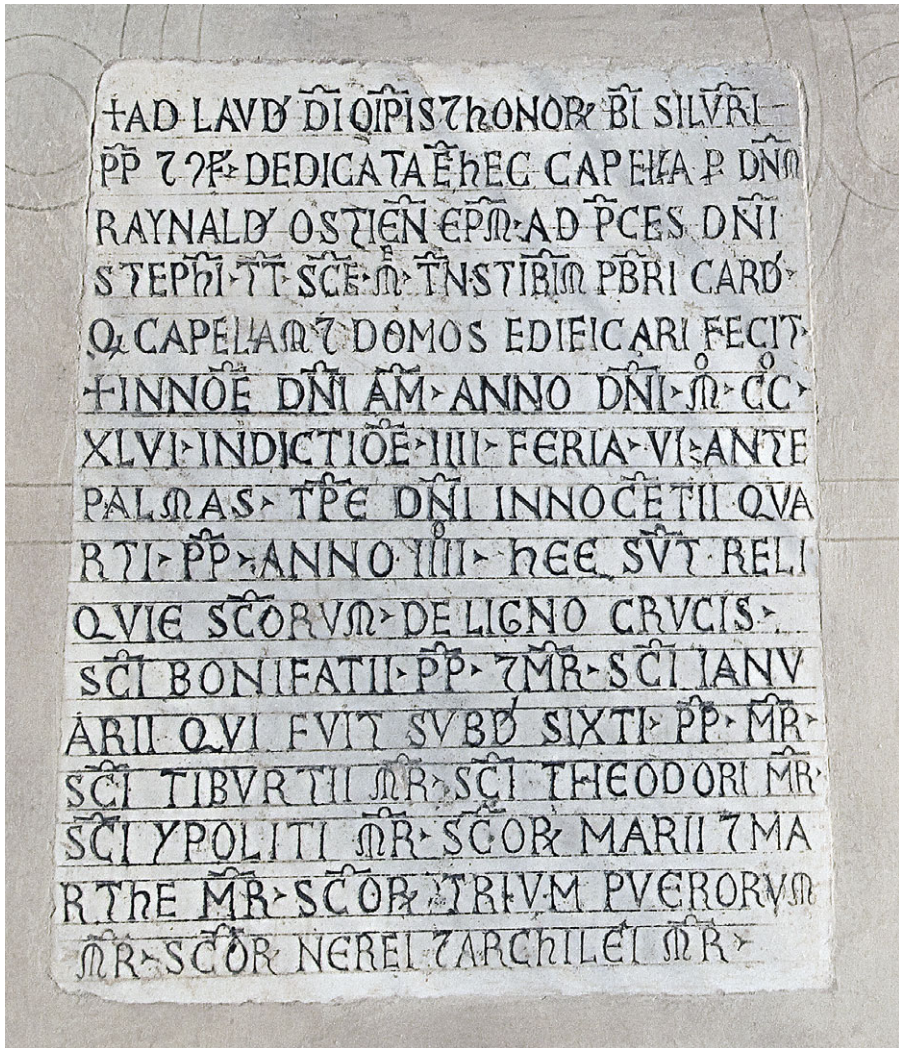
EMBLEMS OF TIME AND POLITICAL POWER

The Labors of the Months at Santi Quattro Coronati

ONE OF THE MOST IMPORTANT DOCUMENTS FOR DATING SANTI QUATTRO Coronati's extensive ensemble of mural decorations is the marble slab embedded in the south wall of the Sylvester Chapel (Figure 3.1). The neatly chiseled inscription records Stefano Conti's patronage, and lists the numerous relics contained in the oratory's altar.¹ It also reveals a great deal about how time was measured in papal Rome during the thirteenth century:

This chapel was dedicated in praise of almighty God and in honor of the blessed Sylvester, pope and confessor, by Rainaldus, Bishop of Ostia, who embraced the prayers of Stefano, cardinal priest of Santa Maria in Trastevere, who commissioned the construction of the chapel and residence. In the name of God, Amen. The year of our Lord 1246, indiction IV, on the Friday before Palm Sunday, in the fourth year of the pontificate of Innocent IV.²

The inscription declares that the Bishop of Ostia (i.e., Rinaldo de' Conti di Segni, a relative of Stefano Conti and the future Pope Alexander IV) consecrated the chapel on a precise historical date that can be rendered according to the modern Western calendar as March 30, 1246. Yet, as it was presented to thirteenth-century viewers, the date came swaddled in a series of parameters that publicized the papacy's power in the arena of time reckoning. More specifically, viewers were impelled to understand the chapel's moment of consecration in relation to four ecclesiastical parameters: the birth of Christ,



3.1. Dedicatory inscription, 1246, Sylvester Chapel, Santi Quattro Coronati, Rome. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.

the liturgical calendar year, the papacy's fiscal calendar, and the reign of the current pontiff.³ In other words, the conception of time conveyed by the inscription can be seen as a multifaceted expression of ecclesiastical authority.

A similar subjugation of temporality suffused the frescoed liturgical calendar displayed across the walls of the Sylvester Chapel's anteroom (Figures 1.3 and 3.2). The poorly preserved cycle originally consisted of twelve figures holding parchment scrolls that unfurled to the ground.⁴ Each calendar page showed four columns inscribed with lists of saints' days, family anniversaries, and formulas for calculating Easter and other movable feasts.⁵ As did the chapel's dedicatory inscription, the frescoed calendar attempted to shape viewers' perception of time in terms set out by institutionalized Christianity.



3.2. Liturgical calendar in room adjacent Sylvester Chapel, showing months of January and February, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.

Medieval time reckoning was a complex process of reconciling multiple natural symptoms of time's passing: the coming and going of daylight, the crowing of the rooster, the warming and cooling of the environment, and the regular movements of celestial objects.⁶ The painted almanac in Stefano Conti's residence reminded viewers that determining official time on the basis of such natural indicators was the domain of ecclesiastical powers.⁷ In the same way that the bell towers of medieval Rome marked the passage of time during the day according to canonical hours, the mural calendar structured time primarily around religious celebrations, the foremost of which was the variable date of Easter issued annually by papal decree. The liturgical mural reinforced the idea of papal control over the calendar by pictorial and epigraphic means. By outlining its temporal divisions on illusionistically depicted parchment scrolls, the mural created the impression that its pages had arrived by messenger fresh from the Curia's chancellery.⁸

All calendars are media for thinking about time. As cognitive aids, they help their users make sense of, and perhaps cope with, time's incessant flow and apparent boundlessness. Yet, in important ways, calendars are also ideological tools that attempt to conceal their own ideological underpinnings by passing off a particular conception of time as, simply, time.⁹ As an emblem of power, the calendar imposes its unique way of thinking about time on its users and beholders. In Ancient Rome, the standardized calendar was deployed as an instrument of imperial expansion alongside other mechanisms for creating uniform societal structures. Like language and currency, the calendar was a

means for bringing newly conquered regions and peoples into the imperial fold by making Roman time everyone's time.¹⁰ By the thirteenth century, political power was less centralized and different regions had adopted different calendar systems.¹¹ Yet, in medieval Rome at least, the official calendar was effectively declared by the pope, and the liturgical almanac decorating the walls of Conti's residence could in some ways be understood as means to assert papal ownership over time measurement against competing systems.¹²

This chapter explores the ways in which Cardinal Conti's murals engaged viewers in speculation around the multifaceted nature of time. The frescoes invited contemplation on the ways in which time might be harnessed in the production of a politically charged worldview, and – on a more profound level – on time's potential for empirical observation and visual representation in the static medium of wall painting. The latter dimensions emerge particularly in Santi Quattro Coronati's great hall, where the labors of the months encircle the south bay in the manner of a horizontal clerestory. This calendar cycle depicts twelve scenes of agricultural labor, each framed in an ogee-arched window and surrounded by an array of ornamental motifs, including decorative colonettes, tendril scrolls, and playful putti who strike dramatic poses while harvesting fruits and hunting wildlife (Figures 1.2–1.4). In accordance with medieval pictorial conventions, the agricultural scenes place particular emphasis on those distinct phases of farm work that were structured by seasonal conditions: sowing, plowing, harvesting, butchering, and so forth.¹³ The east wall, for example, shows September as three coopers assembling a wooden barrel with hammers and flagging irons (Figure 3.3). In the next scene, October is visualized as three figures collecting and stomping grapes for the production of wine. Proceeding leftward, November is the time for tilling the soil and sowing seeds for the next year's harvest. These images seek to evoke a continuous sequence of intervals over the course of the year by showing activities that might be observed in daily life as markers of seasonality. This conception of time could be described as "empirical" in the sense that the calendar cycle seeks to evoke time as a perceivable phenomenon by means of events occurring in the realm of ordinary experience. Yet, the calendar's representation of time is also decidedly "aristocratic," for the temporal experience evoked is not that of the laborer on the farm but of the privileged nobleman observing his workers as if through a window.

In what follows, I examine the iconographic and representational modes through which the labors of the months in Conti's great hall placed manifold conceptions of time in conversation with each other. Its primary emphasis is on the portrayal of experienced time as cyclical, all-encompassing, and governed by the churning machinery of the macrocosm. The macrocosmic conception of time is underscored by depictions of the seasons in the four triangular spandrels, which create visual and thematic links between the calendar and



3.3. Labors of the months (September–November), ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

the large celestial diagram in the vault (see [Figure 2.6](#)). Like the architectural members on which they are placed, the seasons unite calendar and vault by leading viewers' eyes from one set of images to the next. Each personified season is surrounded by representations of the winds. Spring, in the spandrel between April and May, appears as a young boy flanked by flowering trees ([Figure 3.4](#)).¹⁴ Summer, depicted as a young man, carries agricultural tools between August and September ([Figure 3.5](#)).¹⁵ Autumn is shown as an aging man hunched in sheepskin, in the spandrel above December ([Figure 3.6](#)).¹⁶ Above January, Winter appears as a bearded old man in a brown vair-lined cloak ([Figure 3.7](#)).¹⁷ By representing the seasons as men of increasing age, the four spandrels link the yearly cycle to the human life cycle, thereby alluding to the central analogy between microcosm and macrocosm. Thus, in addition to creating a visual link between the vault and the three walls below, the images of the seasons thematically reinforce the connection between the calendar and the zodiac by emphasizing the correspondences between the stages of human life, the four seasons, and the twelve winds.

Citations of antique motifs and visual storytelling devices both enrich and complicate this notion of time as cyclical, observable, and predictable. Elements of pictorial narrative explore the capacity of painting as a static medium to convey the experience of temporal duration.¹⁸ At the same time, figures of temporal transition, eternity, and other elements drawn from the iconographic repertoire of antiquity disrupt the cycle's principal conception of time as unidirectional and regular. References to Janus – the custodian of temporal thresholds – and Aion – the god of absolute time – invite the frescoes' beholders to negotiate contrasting understandings of time and to



3.4. Spring, south bay spandrel, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

contemplate the ability of wall painting to “fold” time by means of anachronistic juxtaposition.

Such painterly manipulations of time are best understood in relation to the overtly anachronistic lunettes and typological diagrams of virtues and vices that adorn the walls of the hall's north bay. Whereas the labors of the months in the south bay present time as experienced from within, the virtues cycle in the north bay commingles figures from different historical eras to simulate a timeless and all-encompassing perspective. In relation to the panorama of history in the virtues cycle, the pictorial citations of antique artifacts in the north bay lunettes are presented as emblems of cultural and temporal distance. The river gods, Mithras, and the deified sun and moon are marked out as *spoliated* images, culled from the storehouse of Roman antiquity. Beholders were meant to perceive them as images that have been decoupled from their cultic significance and assigned new signifying roles as reminders of *Romanitas*¹⁹ and the pastness of the past.



3.5. Summer, south bay spandrel, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

THE NOBLE GAZE

The great hall's calendar cycle begins below the personification of winter on the west wall, where January appears as the enthroned deity Janus resting his feet on a globe (Figure 3.8). The figure's tripled gaze looks rightward to the past, straight ahead into the present, and leftward to the future. In the background, a tree with three blossoming crowns echoes the figure's tripartite head, while the tree's seasonally improbable flowers underscore the scene's celebratory mood. In a nearby kitchen, a cook prepares a meal over a blazing fire pit, while a young servant dishes out food and drink to the saluting divinity. At the top right, an array of cured meats hangs from a rod, attracting the attention of a corpulent rat looking to partake in the season's festivities.²⁰ In the adjacent scene, February appears as an aging nobleman pruning a small tree with an axe. Identified by a caption as FEBRARIUS, the figure is unexpectedly positioned on the outside of the arched niche, between



3.6. Autumn, south bay spandrel, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

January and March. This peculiar placement turns the figure into a transitional character, complementing the role played by Janus as gateway to a new agricultural year.²¹ The theme of transition carries over into the next scene, where March, in contrast to the older men representing January and February, appears as a young man having a thorn extracted from his foot by a noblewoman (Figure 3.9).²² The three faces of Janus, the liminal placement of February, and the youth of March all combine to suggest the emergence of a new temporal division and, as will become clear, the introduction of a decidedly human conception of time.²³

In the final scene on the west wall, April is visualized as pastoral springtime with two shepherds engaging in casual conversation while a flock of sheep grazes in the foreground (Figure 3.10).²⁴ The cycle continues on the south wall with May represented as an aristocrat riding a white horse that closely resembles that of Pope Sylvester in the chapel one floor below (Figure 3.11).



3.7. Winter, south bay spandrel, ca. 1244–54, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

Lavishly dressed and holding a bouquet in his right hand, the noble rider approaches two energetic boys collecting fruit from a tree.²⁵ In the adjacent niche, June harvests grain with two companions,²⁶ while the subsequent scene portrays July as an aging man gesticulating at two farm boys threshing grain on a millstone.²⁷ To the far left, August sits on a chair, apparently exhausted from the season's heat, while a young servant offers him a bowl of olives.²⁸

The final four scenes of the calendar cycle appear on the east wall (see [Figure 3.3](#)), and focus primarily on production of the staples of noble indulgence, particularly wine and cured meats.²⁹ Accordingly, the wooden casket manufactured in the September painting will hold the wine produced in the October scene, which in turn will be enjoyed in celebration of the new year on the opposite wall. The butcher scene visualizing December on the far left establishes a comparable link with the image of January: The slaughtered hog hung from the rod above the seated figure of December appears again in the



3.8. Labors of the months (January and February), ca. 1244–54, west wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

form of hams and sausages in Janus's kitchen, thereby emphasizing the cyclicity of the calendar year, in which the last month is simultaneously prior and posterior to the first month (Figure 3.12).

The twelve scenes of the mural calendar advance two intertwined perspectives on human labor. On the one hand, agricultural work is presented as a theologically significant activity associated with salvation and the very existence of time and temporality. On the other hand, the murals figure agricultural work, and manual labor more generally, as structurally “othered” in relation to an aristocratic beholder. Across the sequence of months, the murals depict temporal duration as experienced by the nobleman who looks, rather than by the laborer who works. When an aristocrat appears within a painted scene – as, for example, in January, August, and December – he is either waited on by servants or observing his laborers as they perform quotidian tasks.³⁰ The cycle's power structure is particularly evident in the calendar's final scene, where the aristocrat sits, stick in hand, on a sturdy chair as he (apparently) lectures his butcher on the merits of pork (Figure 3.12).³¹ The figure's posture, garments, and throne-like chair echo those of the male figures in the cycle of liberal arts in the lunettes above, which represent the non-manual, intellectual labor reserved for the “free” classes. The December scene accordingly models the



3.9. Labors of the months (March), ca. 1244–54, west wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

painting's mode of reception by figuring the aristocratic gaze within the image. The relationship of the seated nobleman to the kneeling butcher is one of objectification and class differentiation rather than identification.³²

The positive, salvational dimension attributed to manual labor in medieval thought was a constitutive aspect of the social hierarchy conveyed by the mural calendar.³³ In theological terms, agricultural work was framed as a curse that had been brought on by humanity's original sin but that nevertheless served a redeeming function in Christian history.³⁴ Yet, the advancement of such theological framing was typically the domain of individuals who did not themselves participate in manual labor.³⁵ In broad terms, medieval theologies of labor understood agricultural work in relation to the creation narrative of Genesis, and in relation to monastic ideas about physical hardship as essential to



3.10. Labors of the months (April), ca. 1244–54, west wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

the proper spiritual development of monks. The opening chapters of Genesis provided justification for the notion that working the soil was both an act of penitence and a means to future salvation. Expulsion from Eden had brought punishment in the form of backbreaking exertion as Adam struggled to produce food from the unforgiving soil. With further sinful acts, notably the murder of Abel, the state of the soil worsened.³⁶ Adam's hardship accordingly became an emblematic reference point in monastic thinking about the value of agricultural work. Writers of the Cistercian order, the most zealous followers of the Rule of Saint Benedict, regularly linked the monks' toiling in the fields to the sweat of Adam's brow, which watered the soil and brought forth the



3.11. Labors of the months (May–August), ca. 1244–54, south wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

bread that would both fill their stomachs and be transformed into the redeeming body of Christ in the celebration of the Eucharist.³⁷ Such theoretical reflection, as Kristin Aavitsland has shown, informed the frescoes at the Cistercian abbey of Tre Fontane on the outskirts of Rome, where a scene of



3.12. Labors of the months (December), ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

Adam working the soil was lifted out of its narrative sequence to stimulate thinking about the role of labor in salvational history (Figure 3.13). Although the painting could be seen to elevate manual labor to a level of theoretical knowledge, it was not directed at the hardworking monks but instead at the monastery's abbot, “who may have viewed the image of the working Adam against the background of a metaphorical reading of his order's classic texts on *labor manuum* and Adam's sweat.”³⁸ The calendar cycle at Santi Quattro Coronati offers a similar commentary on the relationship between labor and



3.13. Scene from Vita Humana fresco cycle showing Adam working the soil, ca. 1300, Abbey of Tre Fontane, Rome. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

social hierarchies. Primarily directed at members of the papal court, the murals present a view of agricultural work from a distance, as a background activity observed by noble elites who were relieved from the need to physically cultivate their own land. The simple garments of the shepherds, cask makers, farmers, and servants mark them as rustics dependent on the nobleman's generosity, and members of a class whose purpose was to bring forth the products needed for noble enjoyment and display.³⁹

BETWEEN NARRATIVE AND PERSONIFICATION

Calendars were a common feature of monumental decorative programs produced in Italy in the twelfth and thirteenth centuries.⁴⁰ Notable examples of sculpted cycles of the months, datable to the twelfth century, decorate the portals of Ferrara Cathedral, the church of Pieve di Santa Maria Assunta in Arezzo, and the cathedral of Sessa Aurunca.⁴¹ In Rome, a series of



3.14. Fragmented scene from calendar cycle, ca. 1260, Palazzo Senatorio, Rome. Photograph: Domenico Ventura.

monumental calendars were executed in fresco over the course of the thirteenth century.⁴² Most of these survive only as fragments, including the remnants of a labors of the months cycle found in an office space in the Palazzo Senatorio on the Capitoline Hill (Figure 3.14).⁴³ Another partially preserved calendar is tucked away in a barely accessible part of the residential tower attached to the church of San Saba (Figure 3.15). This latter cycle was arranged horizontally as a frieze of medallions depicting agricultural labors, including wine making, plowing, and the slaughtering of livestock. These seasonal images were complemented, on the opposite wall, by another series of roundels that displayed images of planetary deities, indicating that the San Saba tower was originally embellished with a larger agricultural and cosmological fresco program (see Figure 1.18).⁴⁴

The lost monumental calendar of the Benedictine monastery of Santa Maria de Aventino is especially relevant to the discussion of the Santi Quattro Coronati frescoes.⁴⁵ Created around 1244–50, this painted almanac was



3.15. Fragmented cycle of the labors and the months (and planets?), ca. 1260?, residential tower, San Saba, Rome. Photograph: Domenico Ventura.



3.16. Detail of calendar cycle at oratory of San Pellegrino, Bominaco, showing months of January, February, and March, ca. 1263. Photograph: Salvatore Conte / Alamy Stock Photo.

distributed across two arched wall surfaces in the convent's cloister.⁴⁶ Its original appearance was recorded in watercolor sketches by Antonio Eclissi around 1640; these show that the mural combined representations of the months with a detailed liturgical calendar (see [Figure 1.21](#)).⁴⁷ The lower section of the wall surface was divided into six vertical columns listing liturgical feast days, while the lunette at the top depicted the months, personified as single male figures, and a selection of hagiographical stories. Another relevant comparandum is provided by the sophisticated calendar in the oratory of San

Pellegrino in Bominaco (ca. 1263), which is clearly in dialogue with its Roman counterparts (Figure 3.16).⁴⁸ Placed in the sanctuary of the single-nave structure, the cycle offers a multifaceted representation of time by combining liturgical, agricultural, and astrological elements.⁴⁹ The Bominaco calendar organizes these temporal measurements within a framework of slender arches, twelve to each side, with alternating fields showing personifications of the months as well as parchment sheets outlining each month's liturgical events. Surmounting this set of graceful calendric arches are trefoil gables that feature the twelve zodiacal signs, positioned above the written almanacs, and darkly shaded disks indicating phases of the moon above the personified months.

Measured against the calendars in Bominaco and Santa Maria de Aventino, the agricultural scenes at Santi Quattro Coronati evince greater narrative detail and a larger number of iconographic references to ancient pictorial motifs. To elucidate these differences and their significational implications, we might compare the months of January through March as visualized in the respective almanacs. In iconographic terms, the calendars at Bominaco and Santa Maria de Aventino employ largely similar motifs: January appears as a male figure beside a fire; February prunes a bush with a knife; and March is a young man removing a thorn from his foot. The two representations of March adopt the ancient iconography of the *spinario*, the best-known example of which was the bronze thorn-pulling boy displayed in front of the medieval Lateran Palace (Figure 3.17).⁵⁰ This bucolic image emerged as a standard personification of March in Italian calendar cycles, apparently on the basis of the thorn's association with sin, which transformed the scene into an emblem of the presumed carnal properties of the month.⁵¹ At Santi Quattro Coronati, March is rendered by means of a two-figure version of the same theme that cites a different thorn extraction in antique sculptural groups. Its likely source, as



3.17. Three versions of the single-figure *spinario* motif. Left: ancient bronze statue, Musei Capitolini, Rome, 1st century BCE. Photograph: Wikimedia Commons. Center: Santa Maria de Aventino, Rome (detail of Figure 1.21). Right: San Pellegrino, Bominaco, ca. 1263 (detail of Figure 3.16).



3.18. Pan removing a thorn from the foot of a satyr, 1st century CE, Rome, Vatican Museums. Photograph: Wikimedia Commons.

Andreina Draghi has argued, is the intimate scene of Pan removing a thorn from the foot of a satyr (Figure 3.18).⁵² The Quattro Coronati painters accordingly reimagined Pan as a courtly maid tending to a semi-nude adolescent, thereby amplifying the fleshly undertones of the ancient motif while at the same time imbuing the March scene with the distinctive dialogical quality that characterizes the thirteenth-century calendar cycle as a whole. The consistent incorporation of two or more figures into each scene of the Quattro Coronati calendar, save for the sole figure of February, sets it apart from not only the calendars at Bominaco and Santa Maria de Aventino but also most of its medieval Italian counterparts.⁵³ These artistic choices affect the paintings' temporal character. The portrayal of multiple agentive figures serves to downplay the comparably atemporal character that is a hallmark of the medieval calendar tradition in favor of pictorial characteristics associated with narrative – that is, a category of painting devoted to the representation of human action played out in time.

The January fresco further explores the capacity of painting to convey time through narrative means (see Figure 3.8). This scene, the cycle's most expansive and complex, combines storytelling elements and iconographic ingenuity to present a meditation on the question of time's relationship to the static medium of painting. At the center of this painterly meditation sits the curious figure of Janus. It was not uncommon for medieval artists to visualize January

in the guise of the two-faced, occasionally two-headed, divinity.⁵⁴ Janus was understood as a guardian of thresholds associated with topographical passages – doorways, bridges, and gates – as well as temporal transitions, specifically the entrance to a new year.⁵⁵ Medieval calendars regularly pictured the deity as a solitary figure, often seated in front of a blazing fire, or at table feasting on wine, bread, and meats.⁵⁶ Santi Quattro Coronati's variant of January is unusually elaborate with its multi-figure narrative dramatization. The image can be read as a story that unfolds in two episodes, rendered by means of continuous narration against a unified background setting.⁵⁷ In the first, a meal is prepared for Janus by a servant in the foreground; in the second, the same dish is brought by another servant to the seated divinity, as though in a subsequent moment. The scene is remarkably sophisticated in its painterly detail. Janus is rendered with three mouths, three noses, and a beard that wraps around his chins (Figures 3.19 and 3.20). Yet, his head is equipped with just one set of eyes, which the artist has depicted in a "multi-stable" manner that enables the deity's gaze to appear as if peering into past (right), future (left), and present (straight ahead) depending on the viewer's shifting focus.⁵⁸ This dizzying detail theorizes the task of narrative painting, which is to incite viewers to perceive a static picture as temporally elastic. Painted narratives rely on the projective gazes of viewers, who stretch, as it were, the depicted event backward in time to prior actions and forward to subsequent actions.⁵⁹ Painted cycles of the labors of the months operate according to a similar logic, but on a different timescale. The agricultural scenes at Santi Quattro Coronati evoke a series of distinct seasonal moments that viewers tie together into a diachronic flow. The share contributed by beholders is in some ways the notion of time itself, the invisible substructure that organizes disparate events according to their anteriority, presentiality, posterity, and, in the case of calendars, cyclicity.

Yet, perhaps the most riveting detail in the January fresco is the curious attribute held by Janus, which Draghi perceptively identified as a distaff.⁶⁰ Essentially a rod onto which flax or wool is wound for spinning, the distaff carried a twofold meaning in medieval culture: It served as a motif of the manual labor to which humankind had been sentenced after the fall and a potent *memento mori* that drew on the ancient symbolism of life as a thread cut off at death.⁶¹ As a symbol of brevity and hardship, Janus's distaff would accordingly have reminded viewers that the calendar's concept of time is decidedly anthropocentric and that temporal existence per se formed part of humanity's punishment after the original sin.⁶² As a cycle of images devoted chiefly to agricultural labor, the Quattro Coronati mural evokes the creation story narrated by the initial chapters of Genesis.⁶³ Pictorial allusions to humanity's fall are particularly evident in the cycle's first three scenes, which can be read as a summary of the origins of the human condition: January symbolizes



3.19. Fresco showing Janus, ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

the age before the fall, a bountiful world that is immediately followed by toil and death, represented by the personified February, seen clearing away dead shrubs. The pained expression of March in the following scene proclaims the suffering of humankind caused by sin, which finds its emblem in the thorn extracted from his foot (Figure 3.9).⁶⁴

More forcefully than other details, the distaff held by Janus – an unusual attribute for the ancient deity – cues viewer reflection on this scriptural



3.20. Head of Janus, ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

subtext. In antiquity, the distaff had been the attribute of Clotho, one of the three weavers of human destiny, but thirteenth-century beholders would likely have associated the device with the postlapsarian Eve, who was regularly depicted holding a spinning rod in pictorial representations of Genesis.⁶⁵ The enthroned figure of Eve appearing in the contemporaneous creation vault at San Marco in Venice, for example, bears a striking iconographic resemblance to the spindle-wielding Janus at Santi Quattro Coronati (Figure 3.21).⁶⁶ In the



3.21. Postlapsarian Eve, detail from the labors of Adam and Eve in Genesis vault, ca. 1215–35, south cupola, west narthex, Basilica di San Marco, Venice. Photograph: North Adriatic Project fieldwork records and papers, Dumbarton Oaks, Trustees for Harvard University, Washington, DC.

hands of Eve, the distaff generated meaning beyond its instrumentality by evoking the problem of mortality as a defining characteristic of human consciousness of time. This additional level of meaning is particularly evident in a sculptural relief showing the primordial mother with her two infant sons that



3.22. Marble relief from south portal of Ferrara Cathedral showing postlapsarian Eve with Cain and Abel, ca. 1135, Museo della Cattedrale, Ferrara. Photograph: RealyEasyStar / Claudio Pagliarani / Alamy Stock Photo.

originally formed part of the twelfth-century calendar cycle surrounding the south portal of Ferrara Cathedral (Figure 3.22).⁶⁷ Here, Eve appears with a large distaff while working a thick woolen thread that drapes diagonally across her torso to a spindle at her feet. One of the boys, presumably Cain, clutches the distaff as though it were a club. Meanwhile, the other infant reaches in vain for the woolen twine. This thread of life, as it were, aptly creates a bisecting line between the two boys, foreshadowing their permanent separation by fratricide.

The Ferrara relief foregrounds Abel's exegetical role as a figure representing life's transitory nature. As such, the image draws on exegetical interpretations of Abel's purpose in sacred history. For example, according to Isidore of Seville, the fact that Abel was intended to symbolize human mortality was encoded in his name, which the encyclopedist interpreted as *vanitas* (i.e., futility, emptiness, or transitoriness).⁶⁸ Similarly, John Chrysostom proposed



3.23. Lamp niche with fresco of Cain's murder of Abel, ca. 1244–54, west wall of north bay, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

that the purpose of Abel's death was to demonstrate the meaning of human mortality to those who survived him.⁶⁹ At Santi Quattro Coronati, the mural program's sole biblical narrative thematizes precisely this aspect of Abel's story (Figure 3.23). In a recessed niche designed to accommodate a lamp, a small frescoed lunette shows Abel falling to the ground as his brother delivers the fatal blow. Detached from any broader narrative context, the image emblemizes the transitory nature of human existence. Whereas the Ferrara relief drew attention to mortality by means of the distaff, the Roman fresco's role as *memento mori* was reinforced by its placement behind a lamp, which would have invited beholders to perceive both the painted scene and the flickering flame as layered metaphors for transience.⁷⁰ Viewers could moreover connect the image of Cain and Abel to the representations of Job and Pharaoh, situated immediately above in the cycle of virtues and vices (Figure 3.24). The pairing of these particular Old Testament figures evoked the exegetical understanding



3.24. Detail from virtues cycle showing *Patientia* (Patience) with Job on her shoulder trampling *Ira* (Wrath) and Pharaoh, ca. 1244–54, west wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

of the Red Sea crossing as a journey through the realm of the dead, as articulated by Gregory the Great in his *Moralia in Job*.⁷¹ The Exodus episode was a classic motif for death, based on its typological associations with Christ's descent into hell as well as the rite of baptism, itself a symbolically ritualized death and rebirth.⁷² Accordingly, the killing of Abel depicted in the frescoed

niche was a carefully selected Old Testament emblem designed to link thematically to the virtues cycle on the wall above, as well as to the opening section of the calendar cycle in the south bay. Seen in relation to the calendar, the niche image reinforced the subtextual understanding of the section depicting January to March as an allegory of the conditional parameters of labor and mortality that structure humanity's temporal existence after the fall. Janus's distaff, as an attribute of Eve and symbolic motif for mortality, acted as a strong signifier in this pictorial exchange. The distaff expanded Janus's significance as guardian of thresholds to encompass not just the realm of temporal transitions but also the existential passage from life into death.

ECHOES OF ANTIQUITY

A number of scenes in the mural's calendar cycle revolve around motifs drawn from the iconographic repertoire of antiquity. As we have seen, the January and March frescoes playfully reimagine figures of ancient deities as participants in quotidian activities associated with medieval court culture. In the January fresco, the three-faced Janus was surely meant to be perceived both iconically as the ancient god of thresholds and narratively as a feasting medieval nobleman. In similar fashion, the March fresco centers around an intimate moment of care as two representatives of the medieval nobility enact a scene that would have been iconographically recognizable to beholders as an ancient citation. The painters did not intend to disguise these pictorial references but rather to present them as characters and events that could be understood as visually plausible in their pictorial contexts and, at the same time, as symbolically charged in ways that enriched the mural's multifaceted speculation on the nature of time.

When such ancient forms are (re)used in thirteenth-century pictures, they inevitably raise questions of viewer reception. In recent decades, scholarly discourse on how medieval beholders interpreted motifs from antiquity has significantly revised Erwin Panofsky's notorious "principle of disjunction," which argued that the period's religious outlook required classical figures and objects to be stripped of their original meaning.⁷³ According to Panofsky and other scholars of his generation, the medieval world collectively agreed to unlearn the identities of pagan deities and emperors by reinterpreting their images as representations of Christian saints or personified virtues.⁷⁴ Such repression of ancient referents was supposedly driven by deep cultural anxiety about paganism and a collective fear that certain kinds of images might cause viewers to relapse into idolatrous practices.⁷⁵ More recent approaches to the medieval reuse of classical imagery and material remains instead stress the flexibility of the period's interpretive gazes, and tend to see repurposing as additive rather than reductive.⁷⁶ New research has shown that medieval

beholders not only could identify the subjects of ancient images but also could place their original uses and contexts in productive conversation with the meanings these images obtained from new uses and contexts.⁷⁷ Repurposed gems, marbles, and pictorial motifs could serve as sites for speculation on how historical processes of appropriation layer new meanings atop old ones to create rich assemblages of signification.⁷⁸

The Santi Quattro Coronati murals offer a number of occasions for contemplating the hermeneutics of repurposing. At one end of the spectrum, the painted antiques in the north bay lunettes explicitly advertise their importation from prior contexts. These figures appear as largely decontextualized citations of the material remains of Rome's past. As we will see, the absence of explanatory labels to guide viewer interpretation opens up these lunette antiques to reflective looking. At the other end of the spectrum, a figure such as the cooper's assistant in the month of September disguises its own antique origins by posing with an attribute that is both symbolically charged and contextually plausible (Figures 3.25 and 3.26). This youth stands to the far right of the scene displaying a barrel hoop rendered as a golden circle with white highlights. With his gaze fixed on the hoop, the boy appears struck with wonder at its near-perfect circularity. The young apprentice is an entirely plausible participant in the scene's action, which centers on two cask makers constructing a barrel, likely intended for the wine produced in the adjacent representation of October. Yet, the golden hoop also lifts the boy out of the scene's narrative action and turns him into a personification of eternity modeled on the ancient iconography for Aion. Late Roman mosaics and metalware commonly pictured Aion as a semi-nude deity wielding a golden ring symbolizing eternity, often accompanied by personifications of the seasons or other figures associated with time and agriculture.⁷⁹ The large silver *patera* known as the Parabiago plate, for example, pictured Aion alongside an entourage of classical personifications (Figure 3.27).⁸⁰ Here, the deity appears fully enclosed in a large ring adorned with images of the constellations and held aloft by Atlas. At Santi Quattro Coronati, the barrel hoop frames the boy's head and torso in the manner of a tondo portrait. Along with the fixity of the boy's gaze, this subtle framing operation focuses attention on both figure and ring as elements excerpted from a prior context. The careful manner in which the boy scrutinizes his object and displays it to external beholders would have enabled viewers to perceive the boy as a "disguised symbol."⁸¹

By referencing the ancient concept of eternity, the cooper's apprentice enriches the calendar cycle's engagement with philosophical conceptions of time. We might helpfully compare the September fresco to a third-century Roman floor mosaic that, according to Doro Levi's discerning analysis, was designed to stimulate reflection on eternity as defined in Neoplatonic philosophy (Figure 3.28).⁸² Uncovered at Antioch and subsequently reburied



3.25. Labors of the months (September), ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

in situ, the mosaic panel displays a banquet scene with four reclining figures engaged in philosophical discourse.⁸³ At the far left, a partially preserved figure of Aion clutches his wheel and looks toward three men gathered around a small incense burner. An inscription along the top border identifies the visitors as personifications of the future, present, and past, while a second epigraph laid in the floor beneath their couch labels them collectively as *chronoi*. The mosaic emblem therefore sought to distinguish the concept of absolute time from earthly time in accordance with contemporaneous philosophical discourse.



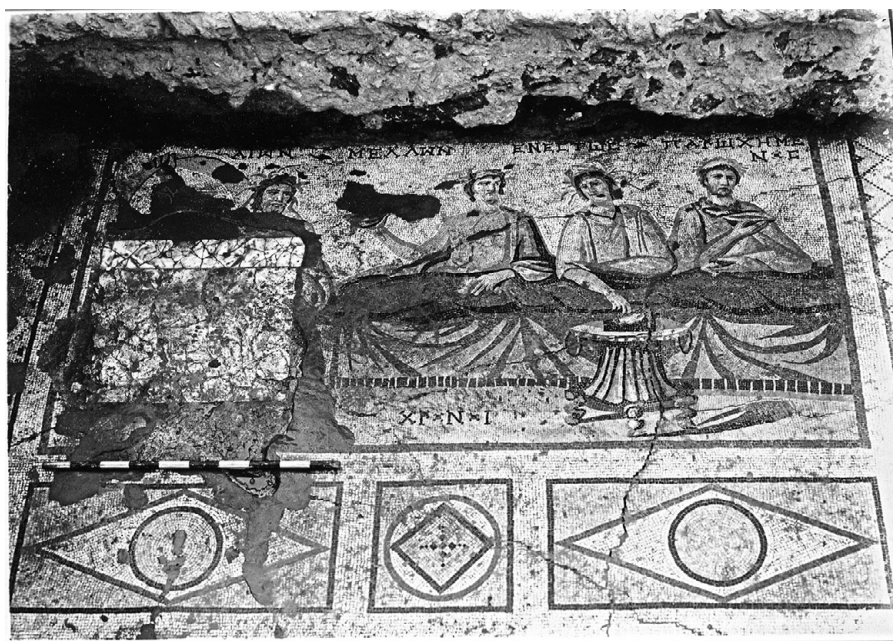
3.26. Cooper's assistant as Aion, ca. 1244–54, east wall of south bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

Following Plato, Plotinus had foregrounded eternity (*aion*) as the ideal archetype of time, in relation to which earthly time (*chronos*), with its temporal modes of past, present, and future, was merely an image.⁸⁴ The mosaic panel could accordingly be seen as a self-reflexive representation of this philosophical distinction: Aion and the three temporal modes personify two contrasting ways of understanding time, yet they also figure as participants in a symposium devoted to defining these differences.

Seen in relation to the calendar cycle as a whole, the cooper's assistant represents in some ways a reversal of the Antioch composition. In the mosaic,



3.27. Silver plate with mythological figures found in Ancient Roman cemetery at Parabiago near Milan, ca. 350–400 BCE, Civico Museo Archeologico di Milano. Photograph: Wikimedia Commons.



3.28. Mosaic floor with Aion and *chronoi*, ca. 250 CE, House of Aion, Antioch on the Orontes. Mosaic was photographed in 1939 and reburied in situ. Photograph: Antioch Expedition Archives, Department of Art and Archaeology, Princeton University.

human time – conceived as a triad of temporal modes – is welcomed into the domestic space of eternity, whereas in the mural the young figure of Aion intrudes on a pictorial world devoted to representing the worldly time that embraces human life and that is subject to empirical experience. Thus, as a fragment of eternity within time, the cooper's assistant with his prominently displayed barrel hoop invited reflection on time versus timelessness. In the thirteenth century, this distinction had acquired an important theological dimension, but it was ultimately rooted in the familiar Platonic dialectic, according to which time could be understood only from the viewpoint of eternity, and vice versa.⁸⁵ The Christian understanding of eternity widely equated it with God's timelessness, which stood in contrast to the temporality of the human world.⁸⁶ From this perspective, God's incarnation as Christ represented a paradoxical entry of divine timelessness into the realm of time. Although the young boy in the September fresco is unlikely to have been associated with Christ *per se*, the figure's relationship to agricultural time parallels Christ's relationship to historical time, as defined by theologians of the period.⁸⁷ The appearance of the cooper's assistant in a section of the calendar cycle devoted to the production of wine further evoked the temporal paradoxes associated with the celebration of the Eucharist, itself a ceremonial re-enactment of the incarnation mystery.⁸⁸

DESACRALIZED ANTIQUITIES

The enigmatic motifs in the north bay lunettes provide further examples of the Quattro Coronati painters' fascination with the formal and iconographic repertoire of the Roman past. Separated from the lower register of virtues and vices by wide and densely ornate architraves, the lunettes display five figures that reference ancient artworks with varying degrees of specificity. The east lunette shows the personified sun and moon flanking a large krater of fruits (Figure 3.29). The west lunette, half of which is lost, preserves the figure of Mithras slaying the bull (Figure 3.30). Mithras wears a so-called Phrygian cap and a billowing cloak as he burrows his knee into the back of a bull and stabs its nose with his knife. In the north lunette, two male figures holding cornucopias recline on either side of a decorative central vase; white sheets cover their legs, and flowing mantles are fastened around their necks (Figures 3.31 and 3.32).

Save the opulent kraters at the center of each lunette, the five figures appear against largely plain backgrounds without identifying inscriptions.⁸⁹ In the absence of contextualizing data, the figures espouse a semantic "openness" that contrasts with the thoroughly inscribed surrounding imagery.⁹⁰ Their signifying roles in the pictorial program therefore rely on viewer participation. At a primary level of representation, thirteenth-century viewers would likely have associated the lunette motifs with ancient artifacts, perhaps



3.29. Personifications of the sun (left) and moon (right), ca. 1244–54, east wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



3.30. Mithras slaying the bull, ca. 1244–54, west wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



3.31. River god, ca. 1244–54, north wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

even with specific objects that were displayed in medieval Rome's streets and piazzas. The reclining figures, for example, appear to be quotations of the large-scale statues of the Nile and the Tiber, which were located on the Quirinal Hill in the thirteenth century. These sculptures were recorded on the Capitoline Hill in a drawing by Maarten van Heemskerck, shortly after they had been moved to the piazza in front of the senatorial palace in the early sixteenth century (Figure 3.33).⁹¹ The river gods connect across the painted space to another antiquarian fresco in the small lunette below August in the south bay (see Figure 1.16). This fresco portrays a lion attacking a deer, and appears to reference the ancient marble seen in the center background of van Heemskerck's drawing. The sculptural group shows a lion attacking a horse and is recorded on the Capitoline Hill as early as the twelfth century, when it appears to have been interpreted as a symbol of civic pride and good government.⁹²

Furthermore, the figures of the sun and moon in the east lunette might also reference ancient images on view in Rome, such as the roundels on the short ends of the Arch of Constantine, or one of Rome's many surviving Mithraic cult images, which sometimes featured personifications of the rising sun and descending moon in *quadrigae*.⁹³ One such image, now in the Louvre, was apparently displayed on the Capitoline Hill in the seventeenth century,



3.32. River god, ca. 1244–54, north wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



3.33. Marten van Heemskerck, view of the loggia of the Palazzo dei Conservatori toward the stairs of the Palazzo Senatorio, ca. 1535. Berlin, Staatliche Museen, Kupferstichkabinett, 79 D2, fol. 69r. Photograph: Staatliche Museen zu Berlin, Kupferstichkabinett / Jörg P. Anders, Public Domain Mark 1.0.



3.34. Marble relief from Rome's Capitoline Hill showing Mithras slaying the bull, ca. 100–200 CE, Louvre Museum, Paris. Photograph: Jean-Pol Grandmont / Wikimedia Commons.

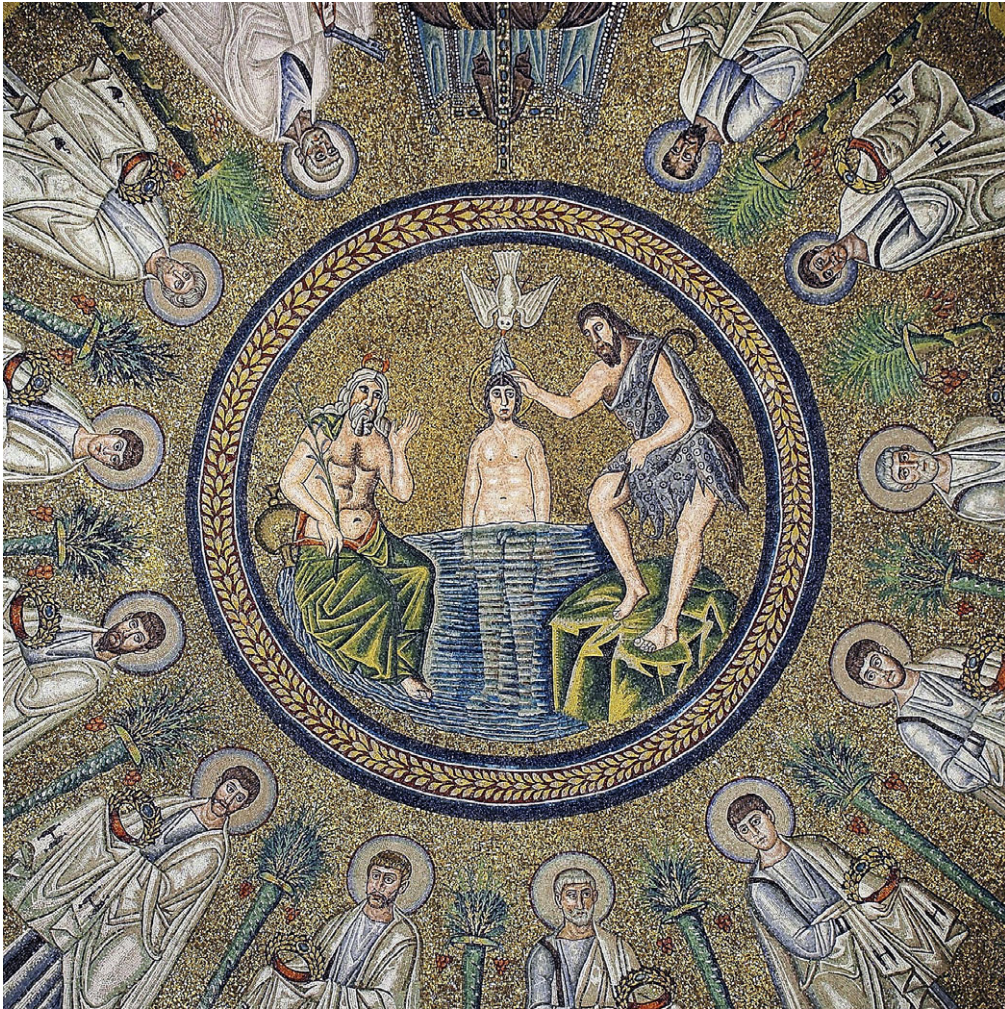
although it remains unclear exactly when the relief was erected in this location (Figure 3.34).⁹⁴ The frescoed Mithras in the west lunette is almost certainly based on a late Roman exemplar of the bull-killing motif from the same family of images as the Louvre marble.⁹⁵ Mithraism had prospered alongside Christianity in the third and fourth centuries, particularly in Rome and nearby Ostia, which was home to hundreds of Mithraic cult sites, about thirty-six of which remain preserved to this day. Such cult chambers typically took the form of Roman dining rooms, or *triclinia*, and always featured the distinctive icon of Mithras as bull slayer positioned at one end as a focus for worship. That the figure of Mithras at Quattro Coronati was modeled on an ancient image from one of these cult sites is strongly suggested by the mural's close adherence to iconographic features such as the deity's Phrygian headdress and trademark pose of conquest.

An antiquarian reading of the lunettes aligns with a well-documented fascination with Rome's ancient material remains in the twelfth and thirteenth

centuries.⁹⁶ Texts such as the *Mirabilia urbis Romae*, a topographical description of the city written by a canon of Saint Peter around 1140, and the *Narracio de mirabilibus urbis Romae*, an antiquarian travelogue written by the English scholar Master Gregorius around 1300, bear witness to the ways in which the ancient city's monuments and sculptures inspired awe and aesthetic delight in historically sensitive beholders of the period.⁹⁷ Viewed through this lens, the lunettes portray a category of objects that have been loosened from the functional roles they once performed and turned into "antiquities" that acquire meaning on the basis of their anachronistic relation to the surrounding imagery.⁹⁸ The decontextualized presentation of the figures, without labels or other interpretive keys, underscored the multivalency of the painted motifs as an aspect of their repurposed nature. As such, viewers were encouraged to speculate about possible thematic relations between the lunettes and the surrounding imagery.

While many interpretations would have been possible, I argue that the lunettes were designed to spur reflection on the relation of the pagan past to the Christian present in ways that aligned with the polemical reading of history presented in the virtues cycle on the walls below.⁹⁹ Viewed from this perspective, the painted antiques could be interpreted as desacralized images purposefully dissociated from former cult value through pictorial appropriation. By portraying the river gods, Mithras, and the deified sun and moon in a decontextualized manner, the north bay frescoes emphasized the imagery's new antiquarian status in a thirteenth-century context. This re-evaluation from cult image to artifact served as a critique of ancient forms of worship, wherein statues of gods were widely regarded as ontologically undifferentiated from the gods themselves.¹⁰⁰

Thirteenth-century viewers could understand the lunettes as part of a broad religious polemic by linking them to well-known scriptural passages in which the beliefs of neighboring cultures and past empires were targeted for divine punishment. One of the best known of such episodes is the account of Elijah's confrontation with the Canaanite prophets of Baal, which described a contest of superiority between Yahweh and Baal over who controlled the fire and rain (1 Kings 19:18).¹⁰¹ Other narratives included the story of how the Ark of the Covenant caused the cult icon of the Canaanite fertility god Dagon to spontaneously crumble before his Philistine devotees (1 Samuel 5). The latter event was memorably depicted in the vault paintings of the Anagni crypt, which describe the tumultuous journey of the Ark across the Holy Land while in Philistine captivity (Figure 5.8, lower right).¹⁰² The stories of Baal's humiliation at Mount Carmel and Dagon's prostration before the Ark at Ashdod were to be understood as mytho-historical contests between competing deities, and were intended to demonstrate the superiority of the biblical God over the "lesser" gods worshipped by neighboring peoples.¹⁰³ Events from the New Testament, too, were interpreted from a perspective of religious



3.35. Baptism of Christ as seen in central medallion of vault mosaic in Arian Baptistery, Ravenna, ca. 500. Photograph: Petar Milošević / Wikimedia Commons.

polemics by early Christian exegetes and artists. For example, Robin Jensen has shown how early mosaicists and sculptors represented the baptism of Christ as a form of exorcism in which Christ's immersion in the Jordan served to drive out the evil spirits of paganism that resided in the waters.¹⁰⁴ Accordingly, a number of early visual representations of the baptism episode, including the vault mosaic of the Arian Baptistery in Ravenna, represented the personified Jordan as a submissive river deity who marvels at the presence of Christ in his stream (Figure 3.35).¹⁰⁵ I contend that the celestial and marine deities figured in the north bay lunettes were incorporated into the fresco program in an analogous manner, as disempowered cult images. Importantly, the figures' disempowerment was not articulated by means of trampling, as in the cycle of virtues and vices. Instead, the pagan motifs were emasculated by

the more subtle means of visual decontextualization. The omission of explicatory labels heightened the multivalent character of the figures as a constitutive aspect of their spoliation and displacement from original contexts.

INTERPRETIVE UNCERTAINTY AS A TOKEN OF HISTORICAL TIME

The semantically opaque representation of the lunette figures also served an ulterior purpose, for it allowed the images to be seen in relation to a broader medieval discourse on semantic ambiguity. Medieval exegetes had long viewed textual ambiguity in positive terms as a reflection of the world's intentionally enigmatic design.¹⁰⁶ Heralded by Paul's pronouncement that "now we see only puzzling reflections in a mirror," medieval commentators insisted that the meaning of sacred history, and creation as such, was fundamentally concealed from the human intellect. According to Alan of Lille, for example, the true state of things could not be experienced directly but was reflected as in a mirror and thus subject to human interpretation in the manner of reading a book or viewing a picture.¹⁰⁷ A model for this mystic attitude had been codified in scriptural exegesis, which saluted the divine purposefulness of *ambiguitas* and its potential for interpretive disentanglement through fourfold *allegoresis*.¹⁰⁸ As Umberto Eco pointed out, the notion that ambiguity was a divine mode of communication offered theological sanction for considering all manner of visual and written work as "endowed with a measure of 'openness'."¹⁰⁹ Eco argued that medieval readers were accustomed to approaching texts with the expectation that "every sentence and every trope is 'open' to a multiplicity of meanings."¹¹⁰ By withholding text from the interpretive process, the Quattro Coronati lunettes presupposed and elicited such flexible interpretive attitudes from viewers. As motifs culled from a bygone era, the lunette figures were inherently ambiguous. The north bay frescoes amplified this ambiguity by presenting the figures without explicatory labels and by juxtaposing them with the thoroughly "explained" images in the cycle of virtues and vices.¹¹¹

The rhetorical force of this non-labeling is best understood in relation to the important roles played by inscriptions in medieval visual art.¹¹² According to some medieval commentators, inscriptions were necessary accompaniments to visual imagery precisely because the ambiguity of images differed from that of scripture, whose range of potential meanings was delimited to the four senses – literal, allegorical, moral, and anagogical.¹¹³ For example, the Carolingian image skeptic Theodulf of Orléans believed that pictures unaccompanied by words were perilously open to interpretation; ordinary viewers could not be trusted to correctly interpret their intended messages.¹¹⁴ The practice of equipping medieval images, relics, and eucharistic wafers with labels and expository inscriptions was in many contexts a direct response to such

widespread anxiety about the equivocality of non-verbal signs.¹¹⁵ Just as the *INRI* titulus had allowed Saint Helena to identify the true cross, the name of God stamped on the eucharistic wafer enabled celebrants to distinguish it from an ordinary cracker.¹¹⁶ In some instances, as Dale Kinney has shown, inscriptions were deployed to sacralize reused pagan imagery, as when an imperial double portrait of Honorius and Maria on a chalcedony cameo was labeled as Saints Sergius and Bacchus.¹¹⁷ For the iconoclast Theodulf, labels on images were necessary mechanisms of control that enabled ecclesiastical patrons to forestall idolatrous viewing and align viewer reception with the teachings of the church.¹¹⁸ Theodulf apparently worried that viewers would read too much into the images they encountered and perhaps even mistakenly direct their worship toward pagan divinities instead of the sacred personages promoted by the church.¹¹⁹ As was the case with scripture, ambiguity in images placed significant interpretive responsibility on recipients; yet, compared with the scriptures, visual representations were burdened by additional forms of polysemy, and the scope of their interpretations had not been codified by church authorities.¹²⁰

There is evidence that some medieval artists leaned into the ambiguity of visual representations by omitting textual explanation. Kinney describes this approach to word-image relations as *de-naming*, which she defines as a strategy whereby artists and commentators deliberately overlooked the referents of common motifs, approaching them instead as straight figuration unencumbered by iconographic meaning.¹²¹ Seen especially in the engagement of medieval artists and beholders with pagan imagery, de-naming involved the refusal to assign any one particular interpretation to ancient figures so as to open them up to new contexts and meanings. An example cited by Kinney is the thirteenth-century artist monk Matthew Paris, who in the miscellany known as the *Liber additamentorum* included a precisely drawn figure of an ancient gemstone held in the monastic treasury of Saint Albans (Figure 3.36).¹²² Paris's detailed depiction shows a Roman emperor rendered in the manner of the ancient demigod of medicine, Asclepius. The figure's left hand holds a winged victory statuette, while his right hand grasps the unmistakable attribute of the medical deity, a staff entwined by a serpent. According to Matthew's verbal account, the large gemstone had protective powers and could be placed on birthing mothers to protect them during delivery.¹²³ Yet, despite the precision of his graphic rendering and the conspicuous thematic links between the cameo's imagery and function, the author refrained from naming the gemstone's figural decoration. Instead, Matthew feigned iconographical unawareness, describing the image only as "a figure clad in rags [*imago quaedam panosa*] holding in one hand a spear on which a serpent is climbing and in the other a boy with a shield on its shoulder."¹²⁴ Matthew's de-naming of the medical deity was perhaps a strategic effort to circumvent



3.36. Matthew Paris's rendering of ancient gemstone with an image of the ancient god of medicine, Asclepius, in *Liber additamentorum*, ca. 1250–9. British Library, Cotton MS Nero D I, fol. 146v. Photograph: © The British Library Board (Cotton MS Nero D I, fol. 146v).

any potential questions of idolatry. By not naming the cult figure on the cameo's surface, he shifted focus away from its theologically questionable origins and toward aspects such as the object's magical properties and material splendor, as well as its usefulness to the would-be mothers of the local community of Saint Albans.

The artists responsible for the Santi Quattro Coronati mural employed a comparable, though not equivalent, strategy of non-labeling to emphasize the spoliated nature of the lunette motifs. In the north bay frescoes, the absence of explicatory inscriptions prompted viewers to explore the thematic connections between the ancient motifs and the religio-political polemics of the adjoining cycle of virtues and vices. With its sequence of elevated heroes and subjugated

villains, the virtues cycle presented history as a series of battles between good and evil oriented toward an eschatological moment of reckoning. Juxtaposed with this history, the lunette figures functioned in some ways as analogs to the villains selected for punishment by the virtues. A number of the subjugated adversaries in the virtues cycle were perceived as agents of chaos and embodiments of the Antichrist. Like the figure of the Antichrist, nemeses such as Nero, Pharaoh, Judas, Simon Magus, and Muhammad represented the continuous presence of forces of chaos and deception throughout human history.¹²⁵ In relation to this clear-cut messaging, the presentation of pagan figures as *spolia* in the lunettes constituted its own form of polemic against pagan cult practices. Viewers were meant to understand the river gods, Mithras, and sun and moon as dethroned pagan deities – that is, as figures whose former cult value had been replaced with a new antiquarian value. Thus, much like the villains in the virtues cycle, the lunettes functioned as reminders of the varied inimical forces that the church (allegedly) had overcome on its predestinarian march through history.

In this regard, the figures' associations with celestial bodies (sun, moon, Mithras) and water (river gods) might have evoked scriptural narratives and exegetical commentaries describing mythological battles between the biblical God and the multiple divinities of pagan polytheism. For instance, the presence of Pharaoh in the virtues cycle invoked the Old Testament Exodus narrative, which portrayed Israel's escape from Egypt as a series of contests between the gods of the two peoples.¹²⁶ In the fresco, Pharaoh appears as a fleeing figure directly below the solar deity Mithras on the west wall (Figures 3.24 and 1.5). The Old Testament nemesis is accompanied by the vice *Ira* (Wrath), who holds up a scroll with a quotation from the Song of Moses (Exodus 15): "I will pursue, I will overtake." Both figures are crushed under the feet of the virtue *Patientia* (Patience), who carries the Old Testament character Job on her right shoulder. In the Exodus narrative, Pharaoh was closely linked to the celestial and marine deities of pagan belief systems. For example, the so-called plague of darkness meted out against Egypt represented not only a humiliating defeat for the nation's demigod ruler but also a theological polemic against the pagan practice of sun worship.¹²⁷ By turning the skies dark, the biblical god demonstrated his superiority over the Egyptian sun god Amon-Re, who was vanquished to the underworld for three days and thus prohibited from surveying his lands.¹²⁸ Similarly, the first of the plagues directed at Egypt, whereby the Nile's waters were transformed into blood, revealed the relative impotency of the deified Nile (Hapi).¹²⁹ This plague, too, constituted a particular affront against the Pharaoh, who was closely associated with the Nile by biblical writers. For example, Ezekiel had described Pharaoh as the Nile's originator as well as its monstrous embodiment in the form of a sea dragon.¹³⁰ From the Egyptian perspective, the annual flooding of the Nile

and the regular rhythm of the sun's daily cycle were symbols of cosmic order (*ma'at*) and the contentedness of the gods. The disruption of these familiar and life-sustaining patterns by the acts of a foreign god therefore amounted to a forceful rebuke of both Egyptian religion and the Pharaoh, who was responsible for maintaining cosmic order by serving as intermediary between the gods and the people.

Pharaoh's close affiliation with the Egyptian deities could shape viewers' interpretation of the marine and solar motifs in the lunettes. In particular, the links between Pharaoh, the Nile, and the Red Sea invited viewers to interpret the two river gods in relation to biblical water symbolism (Figures 3.31 and 3.32). Waters, seas, and the rivers that feed into them were recurring images for chaos in the scriptures.¹³¹ A classic use of such symbolism occurred in the Red Sea crossing (Exodus 14–15), which described the biblical creator's capacity to control the chaotic seas. As recounted by Moses, God first compels the sea to stand up in a heap to allow for Israel's passage, then causes it to swallow Pharaoh and his army in the watery abyss.¹³² Along with other biblical stories – such as God's battle against the sea serpent Leviathan (Job 26:12) and Christ calming the sea (Mark 4:35–41) – the crossing constituted a re-enactment of the primordial subjugation of the rebellious cosmic waters as recounted in the Genesis creation narrative (Genesis 1:20–21; Psalm 74:12–18). These narratives drew upon an established trope of chaos-struggle, or *Chaoskampf*, in Mediterranean mythology, the best-known example of which was the story of Baal's victory over Yam (the Sea) and Nahar (the River) in Canaanite creation myths.¹³³ In Christian thought, the mighty sea came to symbolize the lingering presence of evil in the world's divinely designed order. It was thus no coincidence that the final battle described in Revelation would proceed against the apocalyptic “beast from the sea,” nor that the beast's eventual vanquishment would bring about a new existence in which there was “no more sea” (Revelation 21:1). Such patterns of thinking about water would have cast additional light on the thematic relationship between the river deities in the north bay lunettes and the eschatological image of history presented in the cycle of virtues and vices. Like the defeated Pharaoh, the two river gods could have been perceived as images of subdued chaos. However, unlike Pharaoh, who is explicitly vanquished by trampling, the pagan deities were allusively subjugated by their presentation as unlabeled *spolia*. The decontextualized presentation of the rivers emphasized their new, thirteenth-century stature as artifacts culled from the storehouse of antiquity. As “mere” artifacts, the rivers served as reminders of conquered paganism; yet as symbols of subdued chaos, they were also reminders of the continuous presence of evil in a world designed by God to unfold dialectically as a struggle between chaos and order.

The figures of the deified sun and moon, along with the sun deity Mithras, could be interpreted along similar lines of reasoning (Figures 3.29 and 3.30).

Mithras, whose iconography centers on ritual sacrifice, could be viewed as a reminder of former practices of worship that were reversed under a Christian liturgical system that viewed the god (Christ) as the sacrificed rather than the sacrificer.¹³⁴ *Sol* and *Luna* were also associated with former “idolatrous” practices, particularly the pagan identification of the stars and planets as deities. Accordingly, three of the four villains depicted in the virtues cycle below *Sol* and *Luna* were in one way or another understood as exponents of sun worship (Nero, Alexander, Julian the Apostate).¹³⁵ In the Quattro Coronati frescoes, the sun and moon appear as subservient deities in accordance with their scriptural treatment.¹³⁶ In the biblical account of history, the sun and moon were created by God to operate as markers of time – “the greater light to rule the day and the lesser light to rule the night” (Genesis 1:16). Like the chaotic seas, their existence was contingent on the biblical creator – and along with the seas they were to be eliminated from the post-apocalyptic world described in the Book of Revelation (Revelation 21:23).¹³⁷

Interpretations of the north bay lunettes as reminders of pagan ritual practices and symbols of the struggle between chaos and order constituted latent readings contingent on the active participation of viewers. Such participative and interpretive looking was facilitated by the unlabeled presentation of the images, which foregrounded the figures’ inherent ambiguity. At the same time, the omission of labels served to highlight the perceived impotency of the former cult images, and, in so doing, formed part of the frescoes’ critique of paganism.

For thirteenth-century viewers, the practice of non-labeling would also have been understood as a nod to the distinctive polysemy and temporal complexity associated with the imagery’s material referents: the physical remains of antiquity in the city of medieval Rome. The complex mythological-historical thinking spurred by Rome’s ancient ruins and artifacts is succinctly captured by texts such as the *Mirabilia urbis Romae* and Master Gregory’s *Narracio*. In these antiquarian accounts, the city’s ancient remains were perceived as dense repositories of myths, anecdotes, and prophecies.¹³⁸ For example, the *Mirabilia* presented the urban topography of medieval Rome as a mesh of polychronic sites where (memories of) past structures seemed to persist within the medieval buildings that had taken their place.¹³⁹ Similarly, sculptures such as the Horse Tamers (Dioscuri) on the Quirinal Hill were interpreted as ancient artifacts harboring Christian prophecies: The two nude figures were at once portraits of the Greek artists Praxiteles and Phidias and the prophetic riders of the apocalypse, who, according to the Book of Revelation, would come to trample on “the mighty princes of the world.” With such descriptions, the author of the *Mirabilia* created a temporally complex portrait of Rome wherein the pagan era was reinterpreted in a Christian perspective as anticipative of the twelfth-century city ruled by the papacy. The temporal

logic of the text was therefore not unlike the anachronistic view of history presented in the virtues cycle at Santi Quattro Coronati: Both drew upon a theological theory of prophetic time that saw past, present, and future in their unity.

In Master Gregory's *Narracio*, the temporal complexity of ancient artifacts was inseparable from the visual ambiguity and interpretive openness of the objects. Throughout his meandering account, Gregory paid particular attention to the ways in which Rome's antiquities spurred interpretive speculation among contemporary viewers, and he candidly acknowledged that his own interpretations of Rome's marvels relied on those of informed locals.¹⁴⁰ Accordingly, the interpretive difficulty of images such as the bronze *spinario* at the Lateran and the two Horse Tamers on the Quirinal was presented as a key aspect of their appeal. Apparently, Gregory did not expect these publicly displayed antiques to speak their meaning plainly. Quite the opposite: He seems drawn to them because their possible identities and significations are up for debate. The *Narracio*'s prime example of iconographic ambiguity is the equestrian bronze statue of Marcus Aurelius at the medieval Lateran Palace (Figure 3.37).¹⁴¹ According to Gregory, it elicited a variety of interpretations from medieval beholders of different levels of society: "There is another bronze statue in front of the papal palace: an immense horse, with a rider whom the pilgrims call Theodoric, although the Roman people say he is Constantine, and the cardinals and clerics of the Roman curia call him Marcus or Quintus Quirinus."¹⁴² After describing the monument in detail, Gregory



3.37. Marten van Heemskerck, view of Lateran Palace with statue of Marcus Aurelius, ca. 1535. Berlin, Staatliche Museen, Kupferstichkabinett, 79 D2, fol. 71v. Photograph: Staatliche Museen zu Berlin, Kupferstichkabinett / Jörg P. Anders, Public Domain Mark 1.0.

elaborates on two competing interpretations that appear to have circulated among the learned: One centers on a certain Marcus, a soldier who rescued Rome by defeating a dwarf king; another on Quintus Quirinus, a hero of the republican era who had saved Rome by riding his horse into a plague-spewing chasm. Yet, rather than lending his support to one of these two interpretive possibilities, he sequences them in paratactic fashion as though to enable future readers and beholders to decide for themselves. Furthermore, while Gregory declares the interpretations attributed to the pilgrims (Theodoric) and the locals (Constantine) to be “worthless,” he nevertheless includes them in his description as though to underscore the monument’s interpretive openness. With such authorial choices, Gregory closely ties the sculpture’s status as *marvel* to its iconographic ambiguity and capacity to engage contemporary beholders in interpretive speculation.

The *Narracio*’s account of the Marcus Aurelius statue highlights the ways in which pictorial ambiguity undergirded the medieval fascination with the material and iconographic heritage of the ancient world. Rome’s antique remains could enjoy vibrant discursive “afterlives” among medieval viewing communities partly because their interpretations were not permanently rooted in historical time. The fact that contemporary spectators perceived the city’s ancient marvels to be interpretatively ambiguous casts a final ray of light on the choice not to label the painted antiquities in the north bay lunettes. By omitting labels and other meaning-stabilizing devices, the lunette figures could perhaps generate – within the confines of Santi Quattro Coronati – the distinctively discursive forms of viewing that seem to have arisen around public imagery in the city’s streets. The omission of labels endowed the painted antiques with the particular interpretive uncertainty associated with ancient remains. This multivalency marked the figures as embodiments of historical time and opened them up to the interpretive gazes of viewers, who were encouraged to explore thematic links between the lunettes and their painted surroundings.

The antique citations in the north bay thus expanded the Quattro Coronati murals’ multifaceted meditation on temporality. As images of surviving antiquities, the lunettes focused attention on time’s passing by underscoring the indeterminacy acquired by ancient objects when dispossessed of their prior historical contexts. Viewers of the Santi Quattro Coronati frescoes could understand the multivalent character of the lunettes as a token of historical time. The unidentified antiques urged viewers to contemplate the murals’ manifold uses of pictorial citation and recontextualization to collocate different conceptions of time within a unified whole. On the one hand, the lunettes stand as pre-contextualized foils to the antique references that are seamlessly blended into the calendar cycle by means of recontextualization. On the other hand, the lunettes model the citational method that undergirds the array of

historical characters populating the cycle of virtues and vices on the walls below. These villains and heroes were selected from the chronicles of history to exemplify – and thereby to lend historical specificity to – the abstract values represented by personified virtues and vices. Like the antique citations in the lunettes and the calendar cycle, figures such as Nero, Alexander, Peter, and Francis were extracted from their own historical context in order to assume new roles in a diagram of history structured by morals rather than chronology. Considered together, these analogous forms of pictorial spoliation complicate the notion of experienced, quotidian time conveyed by the labors of the months. Pictorial techniques of citation, amalgamation, and anachronistic juxtaposition enabled beholders to think about time in non-chronological ways; and to engage in art historical speculation on the capacity of mural painting to evoke and manipulate time by placing past and present in close contact with each other.

NOTES

- 1 The inscription proclaims that Stefano Conti commissioned (*edificari fecit*) the residence (*domus*) that houses the chapel. Although the inscription does not tell us that Stefano hired painters to decorate his residence, his patronage is largely confirmed by documents attesting to his residency at Santi Quattro Coronati, and by an obituary entry in the frescoed liturgical calendar marking the death of the cardinal's father. Further, stylistic evidence suggests that the three cycles of wall paintings were executed by the same group of artists as part of a larger decorative commission. See Draghi, "Il ciclo di affreschi rinvenuto," 150–8; Draghi, "Il calendario nella sala antistante," esp. 190; Tomei, "Dagli Svevi agli Angioini," esp. 44–5.
- 2 The [first section](#) of the inscription reads:
 + AD LAUD(EM) D(E)I O(MN)IP(OTENT)IS ET HONOR(EM) B(EAT)I SILV(ESTR)I I /
 P(A)P(AE) DEDICATA E(ST) HEC CAPELLA P(ER) D(OMI)N(U)M /
 RAYNALD(UM) OSTIEN(SEM) EP(ISCOPU)M AD P(RE)CES D(OMI)NI /
 STEPH(A)NI T(I)T(ULI) S(AN)C(TA)E M(ARIA)E T(RA)NSTIB(ER)IM P(RES)B(ITE)RI(S)
 CARD(INALIS) / Q(UI) CAPELLA ET DOMOS (A)EDIFICARI FECIT /
 + IN NO(MIN)E D(OMI)NI AM(EN) ANNO D(OMI)NI MCC / XLVI INDICTIO(N)E IIII
 FERIA VI ANTE / PALMAS T(EM)P(OR)E D(OMI)NI INNOCE(N)TII QUA / R(TI) / P(A)
 P(AE) ANNO IIII.
- 3 The term "Indiction IV" in the inscription refers to year four of a fifteen-year fiscal cycle introduced in the late Roman period and subsequently adopted by the church. On the term and its use, see R. Dean Ware, "Medieval Chronology: Theory and Practice," in *Medieval Studies: An Introduction*, ed. James M. Powell (Syracuse, NY: Syracuse University Press, 1992), 252–77.
- 4 In the late 1960s, Carlo Bertelli related that the figure of a man could be seen slaughtering a hog below the month of December, which he took as evidence of a cycle of agricultural scenes. The assertion that the calendar room included a sequence of labors has been repeated by some later scholars. However, as Andreina Draghi points out, this detail was not noted by Antonio Muñoz in his 1914 restoration report, and it appears unlikely that figural scenes occupied the lower parts of the walls, which still bear traces of painted drapery, immediately below the liturgical calendar. See Muñoz, *Restauro della chiesa e del chiostro*, 130–2; Carlo Bertelli, "Calendari," *Paragone* 20 (1970): 53–60; Draghi, "Il calendario nella sala antistante," 180–90.

- 5 The surviving sections of the liturgical calendar indicate that it extended across three walls, each of which accommodated four calendar months represented as upright male figures holding parchment scrolls inscribed with the days of the months. Each calendar page had four columns, the rightmost featuring the so-called golden number (a number from one to nineteen used to calculate the date of the full moon); in the next column, a letter from A to G corresponding to the day of the week; the third column listed dates according to the Ancient Roman calendar; and the last column listed feast days and other important dates, including the death of Stefano's father, Riccardo Conti (d. April 24, 1228). The most important studies of the calendar are Theodor Klauser, "Ein Kirchenkalender aus der römischen Titelkirche der heiligen Vier Gekrönten," in *Gesammelte Arbeiten zur Liturgiegeschichte, Kirchengeschichte und christlichen Archäologie*, ed. Ernst Dassmann, Jahrbuch für Antike und Christentum, Erg., 3 (Münster Westfalen: Aschendorff, 1974), 46–70; Silvia Maddalo, "A proposito di un calendario dipinto a Roma, nel Duecento, e di una committenza cardinalizia," in *Immagine e Ideologia. Studi in onore di Arturo Carlo Quintavalle*, eds. Arturo Calzona, Roberto Campari, and Massimo Mussini (Milan: Electa, 2007), 302–12; Draghi, "Il calendario nella sala antistante," 180–90.
- 6 Jacques Le Goff, *Time, Work, and Culture in the Middle Ages*, trans. Arthur Goldhammer (Chicago and London: University of Chicago Press, 1980), esp. 29–52; Gerhard Dohrn-van Rossum, *History of the Hour: Clocks and Modern Temporal Orders*, trans. Thomas Dunlap (Chicago and London: University of Chicago Press, 1996), esp. 29–124.
- 7 Tuomas Heikkilä, "Time and the Eternal City," in *Time in the Eternal City: Perceiving and Controlling Time in Late Medieval and Renaissance Rome*, ed. Tuomas Heikkilä (Leiden and Boston, MA: Brill, 2021), 1–14.
- 8 A similar frescoed liturgical calendar with male figures standing within trilobed arches and holding calendar parchments existed at the Cistercian monastery at Tre Fontane as late as the nineteenth century, when they were recorded in drawings by Séroux d'Agincourt (now Cod. Vat. Lat. 9847, fols. 17–18). See Bertelli, "Calendari," 53–60; Melinda Mihályi, "Pittura profana a Roma al tempo del primo Giubileo," in *Bonifacio e il suo tempo*, ed. Marina Righetti Tosti-Croce (Milan: Electa, 2000), 65–8; Aavitsland, *Imagining the Human Condition*, 31.
- 9 Jacques Le Goff, "Calendario," in *Enciclopedia Einaudi* (Turin: Einaudi, 1977), 2:501–34; Alfred Gell, *The Anthropology of Time: Cultural Constructions of Temporal Maps and Images* (New York: Bloomsbury Academic, 1992); Kevin K. Birth, *Objects of Time: How Things Shape Temporality* (New York: Palgrave Macmillan, 2012).
- 10 Denis Feeney, *Caesar's Calendar: Ancient Time and the Beginnings of History* (Berkeley and Los Angeles: University of California Press, 2007), 209–12.
- 11 As illustrated by Reginald Poole: "If we suppose a traveller to set out from Venice on March 1, 1245, the first day of the Venetian year, he would find himself in 1244 when he reached Florence; and if after a short stay he went on to Pisa, the year 1246 would have already begun there. Continuing his journey westward, he would find himself again in 1245 when he entered Provence, and on arriving in France before Easter (April 16) he would be once more in 1244." Reginald L. Poole, *Medieval Reckonings of Time* (London: Society for Promoting Christian Knowledge, 1918), 46–7. A useful survey of calendrical systems used in Rome between the tenth and sixteenth centuries is Marko Halonen, "Complex Tools for Complex Time: Solar, Stellar, and Lunar Cycles of Time in Medieval Roman Calendars," in *Time in the Eternal City: Perceiving and Controlling Time in Late Medieval and Renaissance Rome*, ed. Tuomas Heikkilä (Leiden and Boston, MA: Brill, 2021), 275–314.
- 12 Emblematic of the church's claim was the cryptic system of "golden numbers" outlined in the leftmost column of the mural's calendar pages. The system enabled papal computists to calculate the annual Easter date in advance. Effectively a method for superimposing the lunar calendar onto the solar calendar, the mathematical complexity of the procedure ensured that only those equipped with computational knowledge, and an Easter table,

could perform the necessary calculations. That the papacy prized this system and the privilege to declare movable feasts is perhaps indicated by the fact that, even though, by the thirteenth century, the ecclesiastical calendar clearly lagged two days behind the astronomical moon, calendar reform was not undertaken until the sixteenth century. See C. Philipp E. Nothhaft, *Scandalous Error: Calendar Reform and Calendrical Astronomy in Medieval Europe* (New York: Oxford University Press, 2018), esp. 57–61, 145.

- 13 For an overview of the iconographies of the months in medieval art, see James Carson Webster, *The Labors of the Months in Antique and Mediaeval Art to the End of the Twelfth Century* (Evanston, IL: Northwestern University Press, 1938); Bridget Ann Henisch, *The Medieval Calendar Year* (University Park: Penn State University Press, 1999); M. A. Castiñeiras González, “Mesi,” in *Enciclopedia dell’arte medievale* (Rome: Istituto della Enciclopedia Italiana, 1991–2000), 8:325–35; Colum Hourihane, ed., *Time in the Medieval World: Occupations of the Months and Signs of the Zodiac in the Index of Christian Art* (Princeton, NJ: Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2007).
- 14 Spring is identified by an inscription as VER (Spring).
- 15 Summer is identified by an inscription as ESTVS (Summer).
- 16 Autumn is identified by an inscription as AVTVMPNVS (Autumn).
- 17 Winter is identified by an inscription as HIEMS (Winter). A second inscription, ALGOR (very cold), describes the frigid conditions of the season.
- 18 For an inspired study on the use of continuous narration and manifold perspectival views to convey temporal progression in Ancient Roman mural painting, see Nathaniel B. Jones, “Starting from Places: Continuous Narration and Discontinuous Perspectives in Roman Art,” *Art Bulletin* 100:1 (2018): 7–35.
- 19 Broadly speaking, *Romanitas* (Roman-ness) refers to the various ideas and myths by which Romans defined themselves. In this particular instance, *Romanitas* refers to the ways in which medieval papacy cultivated the antiquity of both the city of Rome and the Roman church. The painted antiquities at Santi Quattro Coronati call attention to Rome as a site where ancient material splendor and Christian political power are merged. A good treatment of Roman self-identity in the thirteenth century is Robert Brentano’s *Rome Before Avignon: A Social History of Thirteenth Century Rome* (Berkeley and Los Angeles: University of California Press, 1990).
- 20 An inscription on the red border below reads “IENVARIVS VINVMQ(VE) CIBARIA QVERO” (January gives me wine and food). Noviello, “L’apparato epigrafico,” 6.
- 21 The unusual placement may be related to an architectural remodeling and subsequent repainting in the 1250s, which involved the removal of a fireplace. If there was such a fireplace, its funnel would have protruded from the wall with the painted calendar wrapping around its sides and front so that February would have been placed in a painted niche of its own, possibly accompanied by other figures, on the front face of the chimney. The chimney’s removal reduced the amount of wall surface available, leading the painters to suppress the niche of February and instead place the figure on the threshold between the widened arcades of January and March. See Barelli, *The Monumental Complex of Santi Quattro Coronati*, 86; Draghi, “L’Aula ‘gotica,’” 143–5; also Francesca Matera’s technical analysis of the walls in the great hall, “Osservazioni sul supporto murario e sul suo stato di conservazione,” esp. 366, 379, and [note 38](#).
- 22 The caption MARTIVS (March) at the center of the scene identifies the month; an inscription on the red border below reads “MENS HEBET OB SPINAS” (the month suffers from thorns), a direct reference to the month’s thorn-pulling iconography. Noviello, “L’apparato epigrafico,” 8.
- 23 In this sense, the calendar cycle could be seen to reflect the many competing ways of reckoning the year’s beginning. In the solar calendar used for the calculation of saints’ feast days, the year begins on January 1. By the thirteenth century, it had become increasingly common to consider the year’s beginning as the time of the annunciation on March 25

- (although in some Italian cities, including Venice, the first day of the year was March 1). It might also be seen to reflect the medieval ecclesiastical calendar, which was a “lunisolar” calendar: i.e., based on the movement of the moon and the sun. A solar new year was traditionally marked by winter solstice, and the lunar new year by vernal equinox.
- 24 The caption APRILIS (April) at the center of the scene identifies the month; an inscription on the red border below, “ORNATVS PECVDVM FLOS ARBOR DANT MICHI LVDVM,” describes the joy experienced during springtime when plants and trees begin to bloom, and the sheep’s coats are ready to be sheared. Noviello, “L’apparato epigrafico,” 9.
 - 25 The caption MADIVS (May) behind the rider identifies the month. The severely fragmented inscription on the red border below, “[—] TVMERE VO[—] PL[—],” is no longer interpretable. Noviello, “L’apparato epigrafico,” 10.
 - 26 The caption IVNIVS (June) at the center of the scene identifies the month; a fragmented inscription on the red border below, “[—] FRVCTVS SEGETESQ(VE) [—],” references the fruits and crops yielded by the month. Noviello, “L’apparato epigrafico,” 11.
 - 27 Faint traces of a caption, which presumably read IVLIVS (July), can be seen at the center of the scene, behind the branches of the tree. A fragmented inscription on the red border below, “OMNE LEGO [—]S GRANVM PERAMENVM,” references the activity of harvesting and threshing grains. Noviello, “L’apparato epigrafico,” 12–13.
 - 28 The caption AVGVST(VS) (August) behind the seated man identifies the month; an inscription on the red border below reads “CERNO BONAS FICVS VVARVM GRA [—]” (I discern the good figs. . .). Noviello, “L’apparato epigrafico,” 14.
 - 29 In each of the four scenes, a caption identifies the month in question while an inscription on the red border below describes the month’s character or the represented activity, as follows: SEPTEMBER (September) – “RIMAS VASORVM TOLLO FVNDATOR EORVM” (I eliminate the cracks and put in place the hoops of the barrels); OCTVBER (October) – “ARENTES HIEMI PRESSI DANT MVSTA RACEMI” (dried in winter, the pressed grapes provide the must); [NO]VE(M)BER (November) – here the fragmented inscription “[—]O SPERANDO DEO PATRE SOLO” references the hopes associated with a good agricultural harvest along with its underlying spiritual significance; D[EC]MBER (December) – “CARNES PORCINE DANT MAXIMA DONA COQ[—]” (pork gives the greatest gifts).
 - 30 The month of May, moreover, is visualized as a noble youth on a white horse carrying a bouquet. The springtime month was particularly associated with themes of nobility, love, fecundity, and falconry. A thorough examination of the iconographies of May as emblems of nobility is Mario d’Onofrio, *Primavera e nobiltà: la figura di maggio nel Medioevo* (Rome: Gangemi Editore, 2005).
 - 31 So, at least, suggests the inscription beneath the scene: “pork gives the greatest gifts.” See [note 28](#).
 - 32 On the aristocratic and male gazes presupposed by medieval pictorial calendars, see Michael Camille, “‘For Our Devotion and Pleasure’: The Sexual Objects of Jean, Duc de Berry,” *Art History* 24:2 (2001): 169–94; Jonathan Alexander, “Labeur and Paresse: Ideological Representations of Medieval Peasant Labor,” *Art Bulletin* 72:3 (1990): 436–52.
 - 33 Patricia Ranft, *Medieval Theology of Work: Peter Damian and the Medieval Religious Renewal Movement* (New York: Palgrave Macmillan, 2006), 13–32; Paul Freedman, *Images of the Medieval Peasant* (Stanford, CA: Stanford University Press, 1999), 24–33; Michael Camille, “‘When Adam Delved’: Laboring on the Land in English Medieval Art,” in *Agriculture in the Middle Ages: Technology, Practice, and Representation*, ed. Del Sweeney (Philadelphia: University of Pennsylvania Press, 1995), 247–76; Aavitsland, *Imagining the Human Condition*, 95–100; Chiara Frugoni, “Chiesa e lavoro agricolo nei testi e nelle immagini dall’età tardo-antica all’età romanica,” in *Medioevo rurale: Sulle tracce della civiltà contadina*, eds. Vito Fumagalli and Gabriella Rossetti (Bologna: Il Mulino, 1980), 321–41.
 - 34 Le Goff, *Time, Work, and Culture*, 114–15.

- 35 Thomas F. Glick, "Agronomy," in *Medieval Science, Technology and Medicine: An Encyclopedia*, eds. Thomas Glick, Steven J. Livesey, and Faith Wallis (New York: Routledge, 2005), 10–13.
- 36 Genesis, 4:10–12: "And the Lord said, 'What have you done? The voice of your brother's blood is crying to me from the ground. And now you are cursed from the ground, which has opened its mouth to receive your brother's blood from your hand. When you work the ground, it shall no longer yield to you its strength. You shall be a fugitive and a wanderer on the earth.'" (English Standard Version/ESV).
- 37 On these aspects of Cistercian thought and their relation to the "*vita humana*" frescoes at the abbey of Tre Fontane, see the lucid discussion in Aavitsland, *Imagining the Human Condition*, 79–105, esp. 97–100.
- 38 Aavitsland, *Imagining the Human Condition*, 99.
- 39 On the notion of mutual dependency between peasants and nobles, and medieval views of manual work as demeaning and indicative of low social status, see Paul Freedman, *Images of the Medieval Peasant*, 15–39.
- 40 Perrine Mane, *Calendriers et techniques agricoles: France–Italie, XIIe–XIIIe siècles* (Paris: Le Sycomore, 1983); Perrine Mane, "Comparaison des thèmes iconographiques des calendriers monumentaux et enluminés en France, aux XIIe et XIIIe s.," *Cahiers de Civilisation Médiévale Année 115* (1986): 257–64; Melinda Mihályi, "Calendario," in *Enciclopedia dell'Arte Medievale*, 12 vols. (Rome: Istituto della Enciclopedia Italiana) 4:70–1.
- 41 Another example is found at the Baptistry of Parma. For these cycles, see Pierangelo Mazzechi, *Un mestiere per ciascuno: il ciclo dei mesi nel Portale Maggiore della Pieve di S. Maria Assunta ad Arezzo* (Florence: Società Editrice Fiorentina, 2010); Berenice Giovannucci Vigi and Giovanni Sassu, *Il Maestro dei Mesi e il portale meridionale della Cattedrale di Ferrara, Ipotesi e Confronti* (Ferrara: Museo della Cattedrale, 2007); Dorothy F. Glass, "The Archivolt Sculpture at Sessa Aurunca," *Art Bulletin* 52 (1970): 119–31; Chiara Frugoni, *I mesi antelamici del Battistero di Parma* (Parma: Battei, 1992).
- 42 Maddalo, "Rappresentare il tempo a Roma," 583–97.
- 43 Quadri, "I frammenti dei Lavori dei Mesi," 242–4.
- 44 Quadri, "Il ciclo dei mesi e le raffigurazioni allegoriche nella torre abbaziale di San Saba," in *La pittura medievale a Roma. Volume 5*, 245–8.
- 45 Quadri, "Il perduto calendario di Santa Maria de Aventino," 238–41. For thirteenth-century Roman calendars, more generally, see Maddalo, "Rappresentare il tempo a Roma," 583–97.
- 46 The walls were demolished in the eighteenth-century remodeling overseen by Giovanni Battista Piranesi. See Ilari, "Il calendario murale di Santa Maria 'de Aventino'," 27–48.
- 47 By the time Eclissi recorded the mural in the seventeenth century, only the first semester, showing January through June, remained in good condition. A small fragment of the second semester was still visible. The drawings are now preserved in the Royal Library at Windsor Castle as Windsor RL 9217 and Windsor RL 9219. For the drawings, see John Osborne and Amanda Claridge, *The Paper Museum of Cassiano dal Pozzo. Early Christian and Medieval Antiquities. Volume 2: Other Mosaics, Paintings, Sarcophagi and Small Objects* (London: Harvey Miller, 1996), 194–9; Quadri, "Il perduto calendario di Santa Maria de Aventino," 238–41.
- 48 A lucid analysis of the fresco program is Jérôme Baschet, *Lieu sacré, lieu d'images: Les fresques de Bominaco (Abruzzes, 1263), thèmes, parcours, fonctions* (Paris and Rome: École Française de Rome, 1991). For the calendar, see also Valentina Brancone, "Complimenti iconografici per il calendario dipinto dell'oratorio di San Pellegrino a Bominaco," *Arte Medievale* NS 3 (2004): 75–108.
- 49 At Bominaco, the calendar is unexpectedly placed in the sanctuary of the single-nave structure, whereas the front of the nave is decorated with biblical narratives, including a passion cycle. Jérôme Baschet argues that this arrangement indicates how different

- audiences occupied different sections of the space. While the biblical stories in the front were directed at the laity, the more complex calendar surrounded the altar, thereby “consecrating the clergy’s stranglehold on the management of time.” See Baschet, *Lieu sacré*, 155–61, at 160.
- 50 Master Gregorius, *The Marvels of Rome*, trans. And commentary by John Osborne (Toronto: Pontifical Institute of Medieval Studies, 1987), 23. Gregorius identifies the Lateran *spinario* as “a ridiculous statue of Priapus . . . with genitals of extraordinary size.” Krautheimer, *Rome: Profile of a City*, 189, 192–7; Ingo Herklotz, “Der Campus lateranensis im Mittelalter,” *Römisches Jahrbuch für Kunstgeschichte* 22 (1985): 1–43, at 33.
- 51 On the dissemination of the two-figure “*spinario*” in Byzantine art, see Doura Mouriki, “The Theme of the ‘Spinario’ in Byzantine Art (πίν. 19–24),” *Δελτίον Χριστιανικής Αρχαιολογικής Εταιρείας* 24 (1972): 53–66. The single-figure “*spinario*” as a representation of March also appears in the mosaic pavement of Otranto Cathedral, among the archivolt sculptures of Parma Cathedral, and in the Baptistry of Pisa. Isidore of Seville was the primary source for the association between March and lust. In *The Etymologies*, Isidore writes “March (Martius) was named after Mars, the founder of the Roman people, or because at that time all living things are stirred to virility [*mas*, gen. *maris*] and to the pleasures of sexual intercourse.” Isidore of Seville, *The Etymologies*, 128. On this, see also the excellent discussion in Draghi, “Il ciclo dei mesi,” 19–38; Draghi, *Gli affreschi*, 117–18.
- 52 Ancient Roman sculptural groups featuring the motif are found in the collections of the Vatican Museum, the Louvre, and the Museum of Ostia. In her expert analysis of the March image, Draghi elucidates the ways in which the two-figure version of the *spinario* in Santi Quattro Coronati engaged a rich exegetical tradition on the carnal properties of the month. See Draghi, “Il ciclo dei mesi.”
- 53 A relevant exception here is the representation of March surmounting the portico of the cathedral at Sessa Aurunca, which features a two-figure version of the *spinario*. See Glass, “The Archivolt Sculpture,” 127–9, fig. 22.
- 54 Pamela Patton, “Looking Forward and Backward with Janus,” *The Index of Medieval Art*, January 10, 2018, <https://ima.princeton.edu/2018/01/10/looking-forward-and-backward-with-janus/>; Klaus Thraede, “Ianus,” in *Reallexikon für Antike und Christentum* (Stuttgart: Hiersemann 1994), cols. 1259–82; Bianca Kühnel, “The Perception of History in Thirteenth-Century Crusader Art,” in *France and the Holy Land: Frankish Culture at the End of the Crusades*, eds. Daniel H. Weiss and Lisa Mahoney (Baltimore: Johns Hopkins University Press, 2004), 161–86, esp. 165–72.
- 55 Ovid, *Fasti*, Book 1; Augustine, *City of God*, Book 7, chapter IX; Isidore of Seville, *The Etymologies*, 128. On the medieval legend that Janus was one of the sons of Noah, who purportedly had settled in the vicinity of Rome after the waters of the Deluge receded, as recounted in the twelfth century *Graphia aurea urbis Romae*, see Ingrid Rowland, “Bramante’s Hetruscan Tempio,” *Memoirs of the American Academy in Rome* 51–2 (2006–7): 225–38, esp. 227.
- 56 Frugoni, “Chiesa e lavoro agricolo,” lvi; Henisch, *The Medieval Calendar Year*, 39–41.
- 57 On the device of continuous narration, and on narrative painting’s relationship to time more generally, see Jones, “Starting from Places.” An overview of studies of medieval pictorial narrative is Suzanne Lewis, “Narrative,” in *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*, ed. Conrad Rudolph (Oxford and Malden, MA: Blackwell, 2006), 86–105.
- 58 For “multi-stable images,” see W. J. T. Mitchell, *Picture Theory: Essays on Verbal and Visual Representation* (Chicago: University of Chicago Press, 1994), 35–82.
- 59 For narrative images as temporally elastic, see Christopher S. Wood, *Albrecht Altdorfer and the Origins of Landscape, revised and expanded second edition* (London: Reaktion Books, 2014), 96–101; Jones, “Starting from Places,” 7–35.
- 60 Draghi, *Gli affreschi*, 111–15.

- 61 See, e.g., Isaiah 38:12; Stefano De Angeli, "Problemi di iconografia romana: dalle Moire alle Parche," *Mélanges de l'École Française de Rome* 103:1 (1991): 105–28; Ann Rosalind Jones and Peter Stallybrass, *Renaissance Clothing and the Materials of Memory* (Cambridge and New York: Cambridge University Press, 2000), 104–34.
- 62 Kristin Aavitsland offers a compelling analysis of the emergence of temporality and manual labor as consequences of the fall: "The realm of the temporal – in opposition to the realm of the eternal – comes into being when Adam and Eve are expelled from Paradise. Their fall initiates the history of salvation. Because the sin of the first couple necessitates a saviour and a judgment (*felix culpa*), the dynamics of time and history replace the stability and static order of Paradise. In their temporal state outside Paradise, Adam and Eve were subjugated to work, thus temporality and work are entities which mutually define each other. Images of work therefore belong to the iconography of temporality." See Aavitsland, *Imagining the Human Condition*, 95. See also Frugoni, "Chiesa e lavoro agricolo," esp. 335–41.
- 63 At the opening of the Genesis account of creation, God creates "natural time" through the creation of light and darkness, and day and night. After the fall, Genesis begins to measure time in historical terms; the early stages of human history are organized on the basis of the human life cycle, the births and deaths of the first ten "generations." On this, see "Time," in *Dictionary of Biblical Imagery*, eds. Lyland Ryken, James C. Wilhoit, and Tremper Longman III (Downer's Grove, IL: Inter-Varsity Press, 1998), 870–1.
- 64 As per, for example, Origen: "and in that crown of thorns, he received the thorns of our sins woven into his head." Hans Urs von Balthasar, ed., *Origen, Spirit and Fire: A Thematic Anthology of His Writings*, trans. Robert J. Daly, SJ (Washington, DC: Catholic University of America Press, 2001), 130. A number of other examples are provided in Draghi, *Gli affreschi*, 117–18.
- 65 Aavitsland, *Imagining the Human Condition*, 83–5.
- 66 For the representation of Eve in the Genesis vault art in San Marco, see Kurt Weitzmann, "The Genesis Mosaics of San Marco and the Cotton Genesis Miniatures," in Otto Demus, *The Mosaics of San Marco in Venice*, 2 vols. (Chicago and London: University of Chicago Press, 1984), 1:105–42, at 116; Penny Howell Jolly, *Made in God's Image? Eve and Adam in the Genesis Mosaics at San Marco, Venice* (Berkeley and Los Angeles: University of California Press, 1997), 57–61; Aavitsland, *Imagining the Human Condition*, 84–5; and, more generally, Ernst Guldán, *Eva und Maria: eine Antithese als Bildmotiv* (Graz and Cologne: H. Böhlau, 1966).
- 67 For the portal and its sculptural decorations, see Vigi and Sassu, eds., *Il Maestro dei Mesi e il portale meridionale*; Christine Verzár Bornstein, *Portals and Politics in the Early Italian City-State: The Sculpture of Nicholas in Context* (Parma: Università degli Studi di Parma, Istituto di Storia dell'Arte, Centro di Studi Medievali, 1988).
- 68 Isidore of Seville, *The Etymologies*, 162.
- 69 Robin M. Jensen, "Joh. Chrysostomus: Homilie bei Übertragung von Märtyrerreliquien," in *Texte der Kirchenväter*, ed. Alfons Heilmann (Munich: Kösel-Verlag, 1964), 4:426–8. On this, see Joseph Leo Koerner's lucid discussion of the meaning of Abel's death in "The Mortification of the Image: Death as a Hermeneutic in Hans Baldung Grien," *Representations* 10 (1985): 52–101, esp. 52–4.
- 70 On the lamp metaphor in Aristotle, Galen, and Avicenna, see Peter H. Niebyl, "Old Age, Fever, and the Lamp Metaphor," *Journal of the History of Medicine and Allied Sciences* 26:4 (1971): 351–68.
- 71 On this, see James W. Earl, "Christian Tradition in the Old English Exodus," *Neuphilologische Mitteilungen* 71:4 (1970): 541–70.
- 72 As Dorothy Verkerk has shown, the crossing was widely interpreted as a type for both Christ's baptism and descent into hell. Accordingly, as a motif for death and rebirth, the Exodus event was commonly evoked in texts recited during early Christian baptism rituals and was frequently depicted in Christian funerary contexts. See Dorothy Hoogland

- Verkerk, "The Font Is a Kind of Grave: Remembrance in the Via Latina Catacombs," in *Memory and the Medieval Tomb*, eds. Elizabeth Valdez del Alamo and Carol Stamatidis Pendergast (Aldershot: Ashgate, 2000), 157–71.
- 73 The idea that medieval art consistently decoupled ancient significance from ancient form language goes back to Panofsky's earliest English-language writings and reached its most fully articulated form in his 1960 *Renaissance and Renascences*. See Erwin Panofsky and Fritz Saxl, "Classical Mythology in Medieval Art," *Metropolitan Museum Studies* 4:2 (1933): 228–80; Erwin Panofsky, *Renaissance and Renascences in Western Art* (Stockholm: Almqvist & Wiksell, 1960), e.g., 84–8.
- 74 Panofsky, *Renaissance and Renascences*, 42–113; Jean Seznec, *The Survival of the Pagan Gods: The Mythological Tradition and Its Place in Renaissance Humanism and Art* (Princeton, NJ: Princeton University Press, 1953), 84–148.
- 75 According to Panofsky, the "medieval mind" felt the pagan world's proximity in a different way from the Renaissance. The perceived danger of lingering paganism caused a form of collective trauma that led medieval artists and beholders to unlearn the meanings of pagan motifs. By contrast, since the Renaissance period was sufficiently removed from antiquity, it could safely unite pagan forms and contents. He writes: "The 'principle of disjunction' would seem to express a fundamental tendency or idiosyncrasy of the high medieval mind: an irresistible urge to 'compartmentalize' such psychological experiences and cultural activities as were to coalesce and merge in the Renaissance." Panofsky, *Renaissance and Renascences*, 106.
- 76 Two excellent overviews of recent research on reuse and spoliation by Dale Kinney are "Ancient Gems in the Middle Ages: Riches and Readymades," in *Reuse Value: Spolia and Appropriation in Art and Architecture from Constantine to Sherrie Levine*, eds. Richard Brilliant and Dale Kinney (Burlington, VT: Ashgate, 2011), 97–120; Dale Kinney, "The Concept of Spolia," in *A Companion to Medieval Art: Romanesque and Gothic in Medieval Europe*, 2nd edition, ed. Conrad Rudolph (Chichester: Blackwell, 2019), 346–56.
- 77 Antje Krug, "Antike Gemmen und das Zeitalter Bernwards," in *Bernward von Hildesheim und das Zeitalter der Ottonen: Katalog der Ausstellung Hildesheim 1993*, eds. Michael Brandt and Arne Eggebrecht (Hildesheim: Bernward Verlag, 1993), 1:161–72; Beate Fricke, *Fallen Idols, Risen Saints: Sainte Foy of Conques and the Revival of Monumental Sculpture in Medieval Art*, trans. Andrew Griebeler (Turnhout: Brepols, 2015), 249–54, 266.
- 78 Ilene H. Forsyth, "Art with History: The Role of Spolia in the Cumulative Work of Art," in *Byzantine East, Latin West: Art-Historical Studies in Honor of Kurt Weitzmann*, eds. Christopher Moss and Katherine Kiefer (Princeton, NJ: Department of Art and Archaeology, Princeton University, 1995), 153–62; Umberto Eco, "Riflessioni sulle tecniche di citazione nel medioevo," in *Ideologie e pratiche del reimpiego nell'alto medioevo: 16–21 aprile 1998*, 2 vols., *Settimane di Studio del Centro Italiano di Studi sull'Alto Medioevo* 46 (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1999), 1:461–84; Fricke, *Fallen Idols, Risen Saints*, 249–54.
- 79 As, for example, in the densely figured allegory of agriculture from Shahba-Philippopolis, where Aion appears alongside Prometheus and personifications of the four seasons, earth, agriculture, precipitation, and the winds. See Katherine Dunabin, *Mosaics of the Greek and Roman World* (Cambridge and New York: Cambridge University Press, 2001), 168, fig. 174.
- 80 Jás Elsner, *Imperial Rome and Christian Triumph: The Art of the Roman Empire AD 100–450* (Oxford and New York: Oxford University Press, 1998), 199–235.
- 81 According to Panofsky, "disguised symbolism" refers to objects and figures that appear as entirely plausible elements of an image but that can also be read as symbols. Importantly, such disguised symbols are only discernible as symbols to external beholders, whereas for characters within the image they are merely objects. Applied to the fresco, this entails that the two cask makers would not recognize the apprentice as a symbol of eternity; to them, he is merely a trainee studying a barrel hoop. See Erwin Panofsky, *Early Netherlandish*

- Painting: Its Origins and Character* (Cambridge, MA: Harvard University Press, 1966), 131–48.
- 82 Doro Levi, “Aion,” *Hesperia* 13 (1944): 269–314.
- 83 The circumstances of the 1930s excavation are discussed in Levi, “Aion,” 269–71; see also Sheila D. Campbell, *The Mosaics of Antioch* (Toronto: Pontifical Institute of Medieval Studies, 1988), 57–9.
- 84 Plotinus, *Ennead. Volume III*, trans. A. H. Armstrong, Loeb Classical Library 442 (Cambridge, MA: Harvard University Press, 1967), 291–356; Andrew Smith, “Eternity and Time,” in *The Cambridge Companion to Plotinus*, ed. Lloyd P. Gerson (Cambridge: Cambridge University Press, 1996), 196–216.
- 85 On the influence of Plotinus on Augustine and Boethius, see Brian Leftow, *Time and Eternity* (Ithaca, NY and London: Cornell University Press, 1991), 73–146.
- 86 Carol Greenhouse articulates this relation nicely: “Time, which was by this definition limited to the (human) world, was a property of the world by virtue of its creation by God and its as-yet-incomplete perfection. To put this another way, time, in theory, represented the incompleteness of the world in relation to God’s completeness.” Carol Greenhouse, *A Moment’s Notice: Time Politics Across Culture* (Ithaca, NY: Cornell University Press, 1996), 21.
- 87 According to Aquinas, Christ’s dual nature could be traced to his double filiation as the child of a human and God: “Consequently, as there are two natures in Christ there must also be two generations or births: one that is eternal, whereby he received divine nature from his father, and one that occurred in time, whereby he received human nature from his mother.” *Summa Theologiae*, Part III, Q. 35.
- 88 Henri de Lubac, *Corpus Mysticum: L’eucharistie et l’église au Moyen Âge: Étude historique* (Paris: Aubier, 1944), 258–62; Carlos Eire, *A Very Brief History of Eternity* (Oxford and Princeton, NJ: Princeton University Press, 2010), 81–93; Anna Marazuela Kim, “‘Painting the Eternal’: Micromosaic Materiality and Transubstantiation in an Icon of Christ at Santa Croce in Gerusalemme, Rome,” in *Almost Eternal: Painting on Stone and Material Innovation in Early Modern Europe*, eds. Piers Baker-Bates and Elena Calvillo (Leiden and Boston, MA: Brill, 2018), 273–98.
- 89 The splendid kraters depicted at the center of each lunette could be understood as representations of ancient vases, with the red and yellow hues suggestive of materials such as yellow marble and red *terra sigillata*. Red pottery made from *terra sigillata* was particularly widespread on the Italian peninsula during the Roman period. Testament to thirteenth-century appreciation for ancient vases is the account by Restoro d’Arezzo, who in his *Composizione del Mundo* (1282) recounts in exuberant terms the excavation of “nearly two thousand” vases near Arezzo. These, the author tells us, were of various colors but primarily red and decorated with plants, flowers, leaves, animals, and “figures in relief – some thin and some fat, some laughing and some crying, living and dead, old and young, armed and unarmed.” Commenting on the craftsmanship, Restoro continues: “When any of these fragments came into the hands of sculptors or artists or other connoisseurs, they consider them like sacred relics, marveling that human nature could rise to such a height in the subtlety, in the workmanship, and the form of those vases, and in their colors and their figures in relief; and they say that the makers were divine or the vases fell from heaven.” Restoro d’Arezzo, quoted in George Henry Chase, *The Loeb Collection of Arretine Pottery* (New York: Fogg Art Museum, 1908), 9–10. For a brief discussion of the episode as a moment in the historiography of art, see Christopher S. Wood, *A History of the History of Art* (Princeton, NJ: Princeton University Press, 2019), 53–4.
- 90 There is no evidence to suggest that these figures were ever labeled. The loss of the painted decorations in the vault of the north bay further impedes any present-day quest to narrow down the figures’ interpretations.
- 91 The river gods were next to the Baths of Constantine on the Quirinal Hill, alongside the Dioscuri (Horse Tamers), at least since the mid-twelfth century. In the *Mirabilia urbis*

- Romae*, a topographical description of Rome possibly written by a canon of Saint Peter's about 1143, the two sculptures are believed to represent Saturn and Bacchus. Master Gregory's *Narracio* identifies the statues as Bacchus and Solomon. Roberto Valentini and Guiseppe Zuchetti, eds. *Codice topografico della città di Roma* (Rome: Tipografia del Senato, 1943), 3:61; Master Gregorius, *The Marvels of Rome*, 26, 61. For ancient sculptures on public view in medieval Rome, see Herklotz, "Der Campus lateranensis im Mittelalter," 1–43; Norberto Gramaccini, *Mirabilia: Das Nachleben antiker Statuen vor der Renaissance* (Mainz: P. von Zabern, 1996).
- 92 Gramaccini, *Mirabilia*, 176. In the thirteenth century, the sculpture appears to have been placed near the entrance to the Palazzo Senatorio; it is now located in the Exedra of Marcus Aurelius in the Musei Capitolini. It was interpreted as a symbol of justice and good government at least since the time of Cola di Rienzo (1313–54). More generally, the lion motif was deployed as a symbol of civic pride in medieval Rome, as indicated by a Roman denarius issued between 1251 and 1265 that showed a female personification of Roma on one side and a lion on the other. For the latter, see Philip Grierson, *The Coins of Medieval Europe* (London: Seaby, 1991), 109.
- 93 Maarten Jozef Vermaseren, *Corpus Inscriptionum et Monumentorum Religionis Mithriacae*, 2 vols. (The Hague: M. Nijhoff, 1956–60). The figures of the sun and moon in the east lunette could also be based on a medieval astronomical manuscript, such as the eleventh-century Biblioteca Apostolica Vaticana, MS Reg. lat. 123, fols. 164r, 167r. See Dieter Blume, Mechthild Haffner, and Wolfgang Metzger, *Sternbilder des Mittelalters: der gemalte Himmel zwischen Wissenschaft und Phantasie. Volume 1: 800–1200* (Berlin: Akademie Verlag, 2012), 1.1:488–95, 1.2:53, figs. 62 and 63.
- 94 The relief is recorded on the Capitoline Hill in the seventeenth century, was subsequently incorporated into the Borghese collection, and is now held in the collections of the Louvre (inv. no. 1023). See Vermaseren, *Corpus*, 176.
- 95 For an overview of Mithraic images in Late Antique Rome, with bibliographic references, see Jonas Bjørnebye, "Mithras Tauroctonos in Late Antique Rome," *Acta ad Archaeologiam et Artium Historiam Pertinentia* 27 (2014): 71–98.
- 96 An example is the story of Bishop Henry of Blois, who traveled from England to Rome in the twelfth century to purchase ancient sculptures. Jeffrey West, "A Taste for the Antique? Henry of Blois and the Arts," in *Anglo-Norman Studies XXX: Proceedings of the Battle Conference 2007* (Woodbridge: Boydell and Brewer, 2008), 213–30; also Günther Binding, *Antike Säule als Spolien in früh- und hochmittelalterlichen Kirchen und Pfälzen – Materialspolie oder Bedeutungsträger?* (Stuttgart: Franz Steiner, 2007); Dietrich Boschung and Susanne Wittekind, eds., *Persistenz und Rezeption: Weiterverwendung, Wiederverwendung und Neuinterpretation antiker Werke im Mittelalter* (Wiesbaden: Reichert, 2008); Lex Bosman, "Spolien aus Roms Vergangenheit als Beitrag zu römischer oder romanischer Architektur," in *Romanik in Europa: Kommunikation – Tradition – Rezeption*, eds. Leonhard Helten and Wolfgang Schenkluhn (Leipzig: Kratzke Verlag für Kunst und Kulturgeschichte 2009), 37–51.
- 97 Anna Blennow, "Wanderers and Wonders: The Medieval Guidebooks to Rome," in *Rome and the Guidebook Tradition: From the Middle Ages to the 20th Century*, eds. Anna Blennow and Stefano Fogelberg Rota (Berlin: Walter de Gruyter, 2019), 33–87.
- 98 Earlier art historical treatments of repurposed classical motifs in Christian art held to the view that medieval artists copied ancient figures without fully understanding their significance. Erwin Panofsky, for example, argued that the artists who created the Mithras figure in the twelfth-century sculptural program at Monreale must have been ignorant of the figure's original meaning. See Panofsky, *Renaissance and Renascences*, 96–100. Such assertions of iconographic ignorance have been broadly overturned by more recent scholarship, which has thoroughly demonstrated that medieval patrons and audiences were able not only to identify classical figures repurposed for Christian contexts but also to reflect on the implications of their reuse and anachronistic relations to new settings.

- 99 Draghi aptly proposed reading the figure of Mithras as a symbol of vanquished paganism. See Draghi, *Gli affreschi*, 320–3.
- 100 On the close identification of the gods with their sculpted images in Roman religion, Jas Elsner writes: “Art did not provide a commentary on religion, it *was* religion; the statue of Artemis of the Ephesians was not just an image of Artemis or a particular interpretation of her, on the contrary, she *was* the goddess.” See Elsner, *Imperial Rome and Christian Triumph*, 206.
- 101 Leila Leah Bronner, *The Stories of Elijah and Elisha as Polemics against Baal Worship* (Leiden: Brill, 1968). On the representation of the story as a polemic against pagan worship in the synagogue frescoes at Dura Europos, see Jaś Elsner, “Cultural Resistance and the Visual Image: The Case of Dura Europos,” *Classical Philology* 96:3 (2001): 269–304, esp. 282–3.
- 102 Another image condemning idolatry appears in the vault recounting Israel’s flirtation with, and subsequent rebuke of, idol worship (1 Samuel 7:3–17). The vault depicts stories from the life of Samuel and is found in the central aisle, adjacent to the vault showing the Ark in Beth-Shemesh and Kiriath Jearim (Figure 1.10). The scene concerning idolatry shows two statues of deities, one crumbled and falling to the ground, and labeled BAALIM (Baal), the other standing on a pedestal and labeled IDOLVM ASTAROT (Idol of Astaroth).
- 103 John Day, *Yahweh and the Gods and Goddesses of Canaan* (Sheffield: Sheffield Academic Press, 2000); Mark Smith, *The Early History of God: Yahweh and the Other Deities of Ancient Israel* (Grand Rapids, MI: William B. Eerdmans Publishing, 2002).
- 104 Robin M. Jensen, “What Are Pagan River Gods Doing in Scenes of Jesus’ Baptism,” *Bible Review* 9:1 (1993): 34–41; Robin M. Jensen, *Living Water: Images, Symbols, and Settings of Early Christian Baptism* (Leiden and Boston, MA: Brill, 2011), 117–25.
- 105 Mythological interpretations of the baptism event also impacted early Christian baptism rituals, which included a ritual cleansing of the font to drive evil spirits away. See Robin M. Jensen, *Baptismal Imagery in Early Christianity: Ritual, Visual, and Theological Dimensions* (Grand Rapids, MI: Baker Academic, 2012), 31–40; Constantin Oancea, “Chaoskampf in the Orthodox Baptism Ritual,” *Acta Theologica* 37:2 (2017): 125–42.
- 106 John Chamberlin, *Medieval Arts Doctrines on Ambiguity and Their Places in Langland’s Poetics* (Montreal and Kingston: McGill-Queen’s University Press, 1999), 3–59; Anthony Ossa-Richardson, *A History of Ambiguity* (Princeton, NJ and Oxford: Princeton University Press, 2019), 25–184.
- 107 The twelfth-century poet formulated this idea as follows: “Every creature in the world, like a book and a picture, appears to us as in a mirror” (*Omnis mundi creatura, quasi liber et pictura, nobis est in speculum*). See Ernst Robert Curtius, *European Literature and the Latin Middle Ages*, trans. Willard R. Trask (Princeton, NJ: Princeton University Press, 1990), 319–26.
- 108 Henri de Lubac, *Medieval Exegesis. Volume 1: The Four Senses of Scripture* (Grand Rapids, MI: William B. Eerdmans Publishing, 1998).
- 109 Umberto Eco, *The Open Work*, trans. Anna Cancogni (Cambridge, MA: Harvard University Press, 1989), 5.
- 110 Eco, *The Open Work*, 5.
- 111 Dale Kinney, “Found Iconography,” in *The Lives and Afterlives of Medieval Iconography*, ed. Pamela M. Patton (University Park: Pennsylvania State University Press, 2021), 9–32. I am grateful to Dale Kinney for generously sharing an advance copy of this essay.
- 112 See Herbert L. Kessler, “The French Connection: Word and Image on the Rosano Cross,” in *La pittura su tavola nel XII secolo. Riconsiderazioni e nuove acquisizioni a seguito del restauro della Croce di Rosano*, eds. Cecilia Frosinini, Alessio Monciatti, and Gerhard Wolf (Florence: EDIFIR, 2012), 133–40; Herbert L. Kessler, “Inscriptions on Painted Crosses and the Spaces of Personal and Communal Meditation,” *Acta ad Archaeologiam et Artium Historiam Pertinentia* NS 24:10 (2011): 161–84; Herbert L. Kessler, “‘To Curb the License of Painters’: The Functions of Some Captions in the Construction and Understanding of Pictured Narratives,” in *Figura e racconto. Narrazione letteraria e narrazione figurativa in Italia*

- dall'Antichità al primo Rinascimento. *Proceedings of the conference, Université de Lausanne, 25–26 November 2005*, eds. Gabriele Bucchi, Ivan Foletti, Marco Praloran, and Serena Romano (Florence: Sismel, 2009), 25–52; Erik Thunø, “Looking at Letters: ‘Living Writing’ in S. Sabina in Rome,” *Marburger Jahrbuch für Kunstwissenschaft* 34 (2007): 19–41; Erik Thunø, “Inscription and Divine Presence: Golden Letters in the Early Medieval Apse Mosaic,” *Word & Image* 27:3 (2011): 279–91; Jeffrey F. Hamburger, “The Iconicity of Script,” *Word & Image* 27:3 (2011): 249–61 (with wide-ranging bibliographic references); Laura Kendrick, *Animating the Letter: The Figurative Embodiment of Writing from Late Antiquity to the Renaissance* (Columbus: Ohio State University Press, 1999); and the excellent collection of essays in Kristin B. Aavitsland and Turid Karlsen Seim, “Inscriptions in Liturgical Spaces,” *Acta ad Archaeologiam et Artium Historiam Pertinentia* NS 24:10 (2011).
- 113 Eco, *The Open Work*, 6.
- 114 Theodulf of Orléans, “Opus Caroli regis contra synodum (Libri carolini),” in *Monumenta Germaniae Historica. Concilia. Volume 2, Supplement 1*, ed. Ann Freeman with Paul Meyvaert (Hanover: Hahn, 1998), 540; Władysław Tatarkiewicz, *History of Aesthetics*, ed. Cyril Barrett, 3 vols. (The Hague: Mouton, 1970–4), 2:100.
- 115 Herbert L. Kessler, *Experiencing Medieval Art* (Toronto: University of Toronto Press, 2019), 96–9.
- 116 Kessler, *Experiencing Medieval Art*, 98.
- 117 Kinney, “Ancient Gems,” 110–11.
- 118 In the absence of such labeling, Theodulf warned, even picture subjects as common as the Virgin and Christ child might be misidentified: “how can we be sure, if there is no inscription (or perhaps there was one but it is now lost) that the subject is not Sarah and Isaac, Bathsheba and Solomon, Elizabeth and John, or simply any woman with her child? Or if we turn to the pagan myths that are so often depicted, how can we be sure this woman is not Venus with Aeneas, Alcmene with Hercules, or Andromache with Astryanax?” Theodulf of Orléans quoted in Salvatore Settis, *Giorgione’s Tempest: Interpreting the Hidden Subject*, trans. Ellen Bianchini (Chicago: University of Chicago Press, 1990), 81.
- 119 In a related passage, Theodulf reiterates the necessity of captions for avoiding idolatrous looking: “The man turned to the artist and asked him which one was the picture of Mary, and which one was of Venus, for they were alike in all regards. The painter supplied one picture with the caption The Virgin Mary, and the other with the caption Venus. The picture with the caption Mother of God was elevated, venerated and kissed, and the other, because it had the caption Venus, was maligned, scorned and cursed, although both were equal in shape and color, and were made of identical material, and differed only in caption.” Theodulf of Orléans quoted in Jan M. Ziolkowski, *The Juggler of Notre Dame and the Medievalizing of Modernity*, 4 vols. (Cambridge: Open Book Publishers, 2018), 4:386–7.
- 120 As Kessler and Zchomelidse have shown, the well-known “Nec deus, nec homo” inscription found on phylacteries, murals, and altar frontals is a classic example of the intricate ways in which ecclesiastical patrons employed words to navigate this treacherous territory. Reminding beholders that “neither God nor man is present; what you see is an image. But it is God and man, what the present image signifies,” the inscription attempted (albeit with unknown success) to restrain the interpretive predilections of beholders. See Herbert L. Kessler, *Neither God Nor Man: Words, Images, and the Medieval Anxiety about Art* (Freiburg im Breisgau: Rombach Verlag, 2007), 65–7; Nino Zchomelidse, “Deus – Homo – Imago: Representing the Divine in the Twelfth Century,” in *Looking Beyond: Visions, Dreams and Insights in Medieval Art and History*, ed. Colum Hourihane (Princeton, NJ: Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2010), 107–27; Nino Zchomelidse, “Liminal Phenomena: Framing Medieval Cult Images with Relics and Words,” *Viator* 47:3 (2016): 243–96, esp. 246–3. Translation cited from Zchomelidse, “Liminal Phenomena,” 246.

- 121 Kinney, "Found Iconography," 9–13.
- 122 Kinney, "Ancient Gems," 106–11.
- 123 Lewis, *The Art of Matthew Paris*, 45–8.
- 124 Matthew Paris, quoted in Lewis, *The Art of Matthew Paris*, 47.
- 125 The identification of the Antichrist with Nero goes back to Revelation 13 and 17. Alvarus of Cordoba (d. 861) and Pope Innocent III (d. 1216) identified Muhammad as a precursor of the Antichrist. Simon Magus was associated with the Antichrist by Joachim of Fiore. In *Moralia in Job*, Gregory the Great identified the Antichrist with Cain, Judas, and Simon Magus. The most detailed description of the Antichrist before Joachim was in the tenth-century letter of Adso, the abbot of Montier-en-Der (d. 992). In this letter, Adso identifies the Antichrist with Antiochus, Nero, and Domitian and with "any layman, cleric, or monk who lives in a way contrary to justice, who attacks the rule of his order of life, and blasphemes the good." For the medieval development of the Antichrist legend, see Bernard McGinn, *Anti-Christ: Two Thousand Years of the Human Fascination with Evil* (New York: Columbia University Press, 1994), esp. 33–172; Philip C. Almond, *The Antichrist: A New Biography* (Cambridge and New York: Cambridge University Press, 2020), esp. 41–132; for Adso's letter, see McGinn, *Visions of the End*, 82–8. For a useful overview, see "Dragon of the Apocalypse," in *Dictionary of Biblical Tradition in English Literature*, ed. David Lyle Jeffrey (Grand Rapids, MI: William B. Eerdmans Publishing, 1992), 210–13.
- 126 John D. Currid, *Ancient Egypt and the Old Testament* (Grand Rapids, MI: Baker Books, 1997), 104–20; John D. Currid, *Against the Gods: The Polemical Theology of the Old Testament* (Wheaton, IL: Crossway, 2013); Ziony Zevit, "Three Ways to Look at the Ten Plagues," *Bible Review* 6:3 (1990): 16–23.
- 127 Thomas B. Dozeman, *Commentary on Exodus* (Grand Rapids, MI and Cambridge: William B. Eerdmans Publishing, 2009), 244–7.
- 128 Currid, *Ancient Egypt*, 112–13.
- 129 *Ibid.*, 109–10.
- 130 Ezekiel 29:3–5 (ESV): "Thus says the Lord God: Behold, I am against you, Pharaoh king of Egypt, the great dragon that lies in the midst of his streams, that says, 'My Nile is my own; I made it for myself.' I will put hooks in your jaws, and make the fish of your streams stick to your scales; and I will draw you up out of the midst of your streams, with all the fish of your streams that stick to your scales. And I will cast you out into the wilderness, you and all the fish of your streams; you shall fall on the open field, and not be brought together or gathered. To the beasts of the earth and to the birds of the heavens I give you as food."
- 131 On the sea as a symbol of chaos in the Bible, see John Day, *God's Conflict with the Dragon and the Sea* (Cambridge and New York: Cambridge University Press, 1985); "Sea," in *Dictionary of Biblical Imagery*, eds. Ryken, Wilhoit, and Longman, 765–6.
- 132 Exodus 15:10 (ESV): "You blew with your wind; the sea covered them; they sank like lead in the mighty waters." Exodus 15:12 (ESV): "You stretched out your right hand; the earth swallowed them."
- 133 The classic treatment is Hermann Gunkel, *Creation and Chaos in the Primeval Era and the Eschaton: A Religio-Historical Study of Genesis 1 and Revelation 12*, trans. William Whitney, Jr. (Grand Rapids, MI: William B. Eerdmans Publishing, 2006). A useful overview of the *Chaoskampf* motif in modern scholarship is K. William Whitney, *Two Strange Beasts: Leviathan and Behemoth in the Second Temple and Early Rabbinic Judaism* (Winona Lake, IN: Eisenbrauns, 2006), 1–30.
- 134 Elsner comments on Mithraism's curious reversal of pagan sacrificial practices: "Mithraism, of course, turned the norms of sacrificial action upside-down; its worshippers did not perform sacrifice to gods . . . rather – in the case of Mithraism – the god himself was his own sacrificial priest." See Elsner, *Imperial Rome and Christian Triumph*, 214–15.
- 135 Nero's association with the deified sun was expressed in infamous architectural works such as the Domus Aurea, which incorporated the colossal statue of *Sol* in its vestibule. The

- medieval reception of Alexander the Great is both rich and complex. While in Late Antiquity his portrait had been fused with that of the sun god Helios, the most common representation of Alexander in medieval art represented his legendary aerial flight in a chariot pulled by two griffins to gaze at the sun, moon, and stars. The story was likely inspired by the tale of Daedalus and Icarus, and the story of Phaeton's ravaging journey in Helios's chariot. Most versions of the medieval *Alexander Romance* included the story of Alexander's visit to the two prophetic trees of the sun and the moon. Julian the Apostate's efforts at restoring pagan religious practices centered around the solar deity Helios-Mithras; around 362 CE, Julian moreover composed the oration "Hymn to King Helios." See Robert Hannah, Giulio Magli, and Antonella Palmieri, "Nero's 'Solar' Kingship and the Architecture of the Domus Aurea," *NVMEN: International Review for the History of Religions* 63:5–6 (2016): 511–24; *Brill's Companion to the Reception of Alexander the Great*, ed. Kenneth Royce Moore (Leiden and Boston, MA: Brill, 2018); Victor Michael Schmidt, *A Legend and Its Image: The Aerial Flight of Alexander the Great in Medieval Art* (Groningen: E. Forsten, 1995); L. J. Engels, "Alexander the Great," in *A Dictionary of Medieval Heroes: Characters in Medieval Narrative Traditions and Their Afterlife in Literature, Theatre and the Visual Arts*, eds. Anthony G. Van Melle et al. (Woodbridge and Rochester, NY: Boydell Press, 1998), 15–24; Julian, *Orations* 1–5, trans. Wilmer C. Wright, Loeb Classical Library 13 (Cambridge, MA: Harvard University Press, 1989), 348–435.
- 136 Most notably Genesis 1:16, according to which God on the fourth day of creation "made the two great lights – the greater light to rule the day and the lesser light to rule the night – and the stars." One of the earliest preserved representations of Christ, found on the ceiling of a tomb in the Vatican necropolis, shows him as a Christ-Helios figure. See Mary Charles-Murray, "The Emergence of Christian Art," in *Picturing the Bible: The Earliest Christian Art*, ed. Jeffrey Spier (New Haven, CT and London: Yale University Press, 2007), 51–64, at 51–2.
- 137 This understanding of the heavenly bodies as owing their existence to the biblical God undergirded the frequent representation of the personified sun and moon in scenes of Christ's crucifixion. In ancient Mediterranean thought, the sun was viewed as an image of divine justice, based on the interpretation of the sun's disk as an omniscient eye in the sky that sees all things. Psalm 19:6 evoked such interpretations in declaring of the sun that "nothing is hidden from its heat." On the sun and moon in scenes of the crucifixion, see Louis Hautecoeur, "Soleil et la lune dans les crucifixions," *Revue Archéologique* 5:14 (1921): 13–32; Gertrude Schiller, *Iconography of Christian Art*, 2 vols. (London: Lund Humphries, 1972), 2:88–164.
- 138 As Nine Miedema has argued, the *Mirabilia* modeled itself on the logic of medieval *mappae mundi*, which produced encyclopedic visions of the world by combining topography, history, and mythological stories. See Nine Robijntje Miedema, *Die Mirabilia Romae: Untersuchungen zu ihrer Überlieferung mit Edition der deutschen und niederländischen Texte* (Tübingen: Max Niemeyer, 1996), 444–52; also Blennow, "Wanderers and Wonders," 77.
- 139 Blennow, "Wanderers and Wonders," 71–83; Manfred Luchterhandt, "Mirabilia – Die Antiken Roms und ihre mittelalterlichen Betrachter," in *Wunder Roms im Blick des Nordens von der Antike bis zur Gegenwart. Katalog zur Ausstellung im Erzbischöflichen Diözesanmuseum Paderborn*, ed. Christoph Stiegemann (Petersberg: Michael Imhof Verlag, 2017), 90–109.
- 140 For example, in his discussion of the Lateran *Spinario*, he writes: "[T]here is another bronze sculpture, a rather laughable one, which they call Priapus." His discussion of the Dioscuri (or Horse Tamers) on the Quirinal Hill expresses a similar sense of puzzlement: "[I]t is said that they represent the first mathematicians, to whom horses were assigned because of the quickness of their intellect." Likewise, concerning the two river gods, which at the time lay next to the Dioscuri: "[T]hey call one Solomon and one Father Liber; Bacchus holds a vine branch in his hand, and Solomon a scepter." See Master Gregorius, *The Marvels of Rome*, 23, 26.

- 141 The bronze sculpture of Marcus Aurelius was clearly one of the most popular and evocative of medieval Rome's marvels. It was subsequently installed on the Capitol as part of the piazza's redesign under the Farnese Pope Paul III (1534–49). Today, the bronze original is sheltered within the Capitoline Museums, while a copy sits on the Piazza del Campidoglio. For the complex medieval reception of the Marcus Aurelius sculpture, see Dale Kinney, "The Horse, the King and the Cuckoo: Medieval Narrations of the Statue of Marcus Aurelius," *Word & Image* 18:4 (2002): 372–98.
- 142 Master Gregorius, *The Marvels of Rome*, 19–20.

FOUR

ALLEGORY, HISTORY, AND POLITICAL ESCHATOLOGY

The Virtues and Vices at Santi Quattro Coronati

THE ALLEGORICAL CYCLE OF SANTI QUATTRO CORONATI'S NORTH BAY IS dominated by ten triumphant virtues arranged on the same register as the calendar in the opposite bay.¹ Each personified virtue carries a saint on its shoulder while trampling two smaller figures. The small-scale vanquished figures represent each virtue's corresponding vice and a historical character who exemplifies it. The saints and the trampled villains serve as historically real *exempla* of the moral qualities represented by the personified virtues and vices. Inscriptions identify all figures, several of which display scrolls with textual citations drawn from scripture, proverb collections, and classical poetry.² The representation of virtues as female knights combating vices conforms to a visual tradition that can be traced back to the ninth-century manuscript illustrations of Prudentius's *Psychomachia*.³ The Quattro Coronati frescoes, however, bring the conventional motif to new levels of pictorial complexity.

Starting on the west wall of the north bay, the cycle unfolds from left to right (see [Figure 1.5](#)).⁴ Much of the painting to the left of the central window is missing, but a fragment in the far left corner preserves the body of a prostrate figure, identified by an inscription as *Idolatria* (Idolatry).⁵ The presence of *Idolatria* indicates that the original composition also included the personification of *Fides* (Faith); this same pair opens the narrative in the *Psychomachia*.⁶ The compositions to the right of the central window are in much better condition. In the niche beside the window, *Patientia* (Patience) carries Job on her right shoulder as two small figures crawl on the ground: the

personification of *Ira* (Wrath) as a young woman in a tunic, and the Pharaoh wearing a crown and brandishing a sword (see Figure 3.24).⁷ In the arch at the right, the virtue of *Humilitas* (Humility) carries David on her shoulder, while the corresponding vice, presumably *Superbia* (Pride), struggles to escape (Figure 4.1).⁸

The north wall features seven niches narrower than the four on the west wall (see Figure 1.5). Occupying the central position is a large figure of Solomon, wearing a crown and pointing upward with his right index finger in a gesture reminiscent of an imperial salute (see Figure 1.29).⁹ At the far left is *Sobrietas* (Sobriety) with Daniel seated on her right shoulder (see Figure 1.35).¹⁰ The corresponding vice, *Luxuria* (Luxury), is accompanied by a young man, identified as MAOMET (Muhammad), kneeling with arms raised.¹¹ To the right of *Sobrietas* is *Concordia* (Concord), who carries Saint Paul on her



4.1. *Humilitas* (Humility) with David on her shoulder, trampling *Superbia* (Pride), ca. 1244–54, detail of virtues cycle, west wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



4.2. *Concordia* (Concord) with Saint Paul on her shoulder, trampling *Discordia* (Discord) and Arius, ca. 1244–54, detail of virtues cycle, north wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

shoulders (Figure 4.2).¹² At her feet are two figures representing discord, who, somewhat ironically, express their shared antagonism by embracing one another in a gesture of unity. The figure on the left is identified as *Discordia* (Discord); her historical companion should probably be identified as Arius of Alexandria.¹³ To the right of the central figure of Solomon is *Largitas* (Magnanimity), who carries the Roman deacon Saint Lawrence on her shoulders (Figure 4.3).¹⁴ Below, two figures on their knees introduce a rare narrative element into the composition. The one on the right, identified as Judas, receives a scroll from the figure on the left, labeled *Avaritia* (Avarice).¹⁵ The



4.3. *Largitas* (Magnanimity) with Saint Lawrence on her shoulder, trampling *Avaritia* (Avarice) and Judas, ca. 1244–54, detail of virtues cycle, north wall of north bay, cardinal’s residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

gesture is likely an allusion to the apostle’s betrayal, which is referenced in the quote from Horace’s *Satires*, “so that no one may be richer than you,” written on the scroll held by *Avaritia*.¹⁶ Finally, at the right end of the north wall, *Vera Religio* (True Religion) stands triumphant atop two figures identified as *Ypocrisis* (Hypocrisy) and *Fariseus* (Pharisee).¹⁷ The figure perched on top of the virtue’s shoulders, whose inscription is partially lost, is most likely Augustine (Figure 4.4).¹⁸

The east wall displays the final four groups of the cycle. To the far left is *Karitas* (Charity), who supports Peter on her shoulders as she tramples *Odium* (Hatred) and the Roman emperor Nero, portrayed as a veritable devil with



4.4. *Vera Religio* (True Religion) with Saint Augustine on her shoulder, trampling *Ypocrisis* (Hypocrisy) and a Pharisee, ca. 1244–54, detail of virtues cycle, north wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

long hairy ears (Figure 4.5).¹⁹ Between *Karitas* and the central window is the virtue of *Timor Domini* (Fear of God), with Jerome seated on her shoulder (Figure 4.6).²⁰ Trampled on the ground are *Inanis Gloria* (Vainglory) and the partially lost figure of Alexander the Great.²¹ To the right of the central window, the virtue of *Amor Celestis* (Heavenly Love) carries Francis on her shoulders while treading on a lavishly dressed figure identified as Julian the Apostate (Figure 4.7).²² The final group, to the far right, shows Dominic seated on the shoulders of *Emulatio Sancta* (Holy Emulation), who tramples



4.5. *Karitas* (Charity) with Saint Peter on her shoulder, trampling *Odium* (Hate) and Nero, ca. 1244–54, detail of virtues cycle, east wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.



4.6. *Timor Domini* (Fear of God) with Saint Jerome on her shoulder, trampling *Inanis Gloria* (Vainglory) and Alexander the Great, ca. 1244–54, detail of virtues cycle, east wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

the figures of Simon Magus and *Emulatio Perversa* (Perverted Emulation) (Figure 4.8).²³

Each group of figures in the cycle of virtues and vices constitutes a kind of coded diagram that employs anachronism and metaleptic transgression to invite active deciphering by viewers. Indeed, each group appears to have been composed according to a typological principle in which historical figures and personifications are paired according to their perceived complementary and oppositional relations. The basic ethical opposition between virtue and vice is extended in the historical dimension by an analogous series of links between contrary historical figures. In the same gesture, two lines of complementary relations are drawn between virtue and saint and between vice and villain. This structural method of pictorial organization establishes typological connections



4.7. *Amor Celestis* (Heavenly Love) with Saint Francis on her shoulder, trampling Julian the Apostate, ca. 1244–54, detail of virtues cycle, east wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

across ontological divides (between allegorical and historical figures) and across temporal divides (between figures belonging to different historical contexts).

The distinctive diagrammatic structure of the cycle brings together two pictorial devices that appeared relatively frequently in medieval art but, until this point, had never been combined in a single composition. First is the motif



4.8. *Emulatio Sancta* (Holy Emulation) with Saint Dominic on her shoulder, trampling *Emulatio Perversa* (Perverted Emulation) and Simon Magus, ca. 1244–54, detail of virtues cycle, east wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

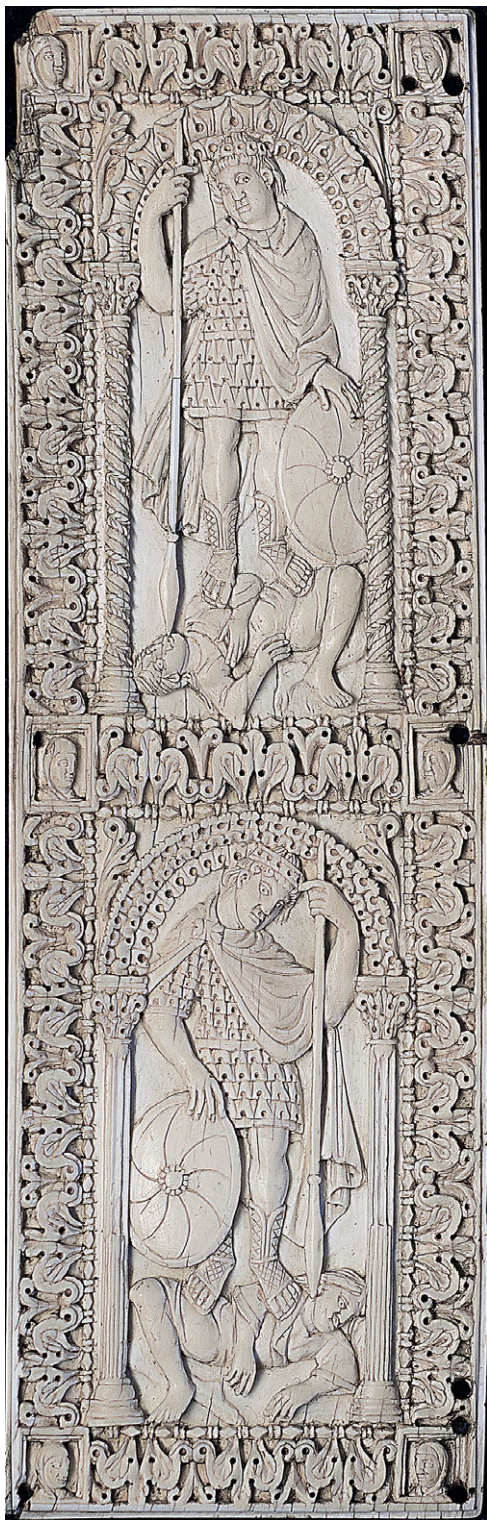
of trampling as a way to represent triumph. This was adapted in early Christian art to depict the victory of good over evil in symbolic terms.²⁴ The motif appears in representations of the *Psychomachia*, where virtues stand over their vanquished foes, and in depictions of Christ trampling animals underfoot. Both types of images appear in Carolingian ivories and in sculpted baptismal fonts and portals of the Romanesque and early Gothic periods.²⁵ The Romanesque dado paintings of Santa Maria at Summaga, in the Veneto, feature four pairs of



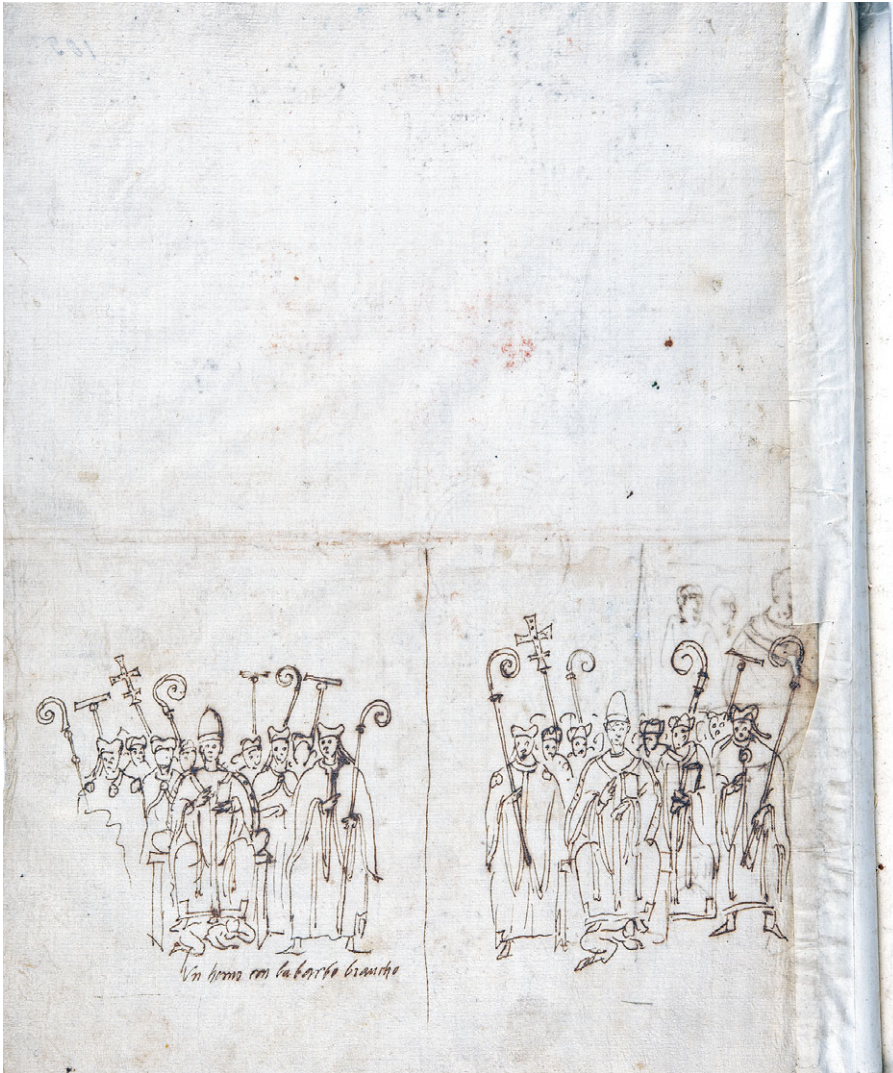
4.9. Frescoed representation of *Desperacio* (Despair) from late twelfth-century virtues cycle at Santa Maria, Summaga. Photograph: Courtesy of Jill Bain.

triumphant virtues perched on top of their thoroughly defeated enemies (Figure 4.9).²⁶ Other examples include a ninth-century ivory plaque now in the Bargello in Florence, which shows two male virtues trampling on vices inside arched niches elaborately framed by vegetal borders (Figure 4.10).²⁷

A local point of reference and a possible source for the Roman murals is a group of lost twelfth-century wall paintings from the medieval Lateran Palace. In an audience hall built and decorated for Pope Calixtus II (r. 1119–24), a series of frescoes depicted the victory of the popes over their imperial rivals in the context of the Investiture Controversy. A set of sixteenth-century pen sketches indicates that the murals employed the motif of trampling to make a pointed political argument on behalf of the papacy (Figures 4.11 and 4.12).²⁸ The drawings show four scenes with enthroned popes – Alexander II, Gregory



4.10. Ninth-century ivory showing virtues trampling vices, Florence, Museo Nazionale del Bargello. Photograph: Gallerie degli Uffizi – Gabinetto Fotografico.



4.11. Sixteenth-century pen drawings showing the murals of the *Camera pro secretis conciliis* in the Lateran Palace, ca. 1122–4, with the triumph of Pope Alexander II over antipope Honorius (left) and the triumph of Paschal II over Albert, Maginulf, and Theodoric (right). Biblioteca Apostolica Vaticana, Barb. lat. 2738, fol. 105v. Photograph: Vatican Library.

VII, Paschal II, and Calixtus II – flanked by prelates and members of the court, with miniature figures of defeated antipopes at their feet.²⁹ The iconographic device of placing the crushed figure at the feet of the enthroned ruler is repeated in all four compositions, and in the culminating scene, the frontal figure of Calixtus II is elevated on the papal cathedra with his feet on the body of Burdinus (antipope Gregory VIII), whose effigy is incorporated as a footrest.³⁰ The lost murals of the Lateran Palace thus put the motif of trampling to political use in context-specific images of papal propaganda.



4.12. Sixteenth-century pen drawings showing the murals of the *Camera pro secretis conciliis* in the Lateran Palace, ca. 1122–4, with the triumph of Gregory VII, Victor III, and Urban II over antipope Clement III (left) and the triumph of Calixtus II over Gregory VIII and Calixtus II (right), together with Henry V displaying a scroll with the Concordat of Worms. Biblioteca Apostolica Vaticana, Barb. lat. 2738, fol. 104r. Photograph: Vatican Library.

The twelfth-century papacy could call upon a well-established pictorial tradition, with its associations of Christ's victory over evil and the virtues' conquest over the vices, to declare the justice of its struggle against imperial claims to investiture.

Whereas the motif of trampling was derived from images of moral triumph, the placing of saints on the shoulders of virtues represents a re-elaboration of

the iconographic scheme of prophets carrying apostles on their shoulders, which appears in a variety of ecclesiastical pictorial programs of the twelfth and thirteenth centuries.³¹ The motif primarily served to articulate a typological relationship between Old Testament prophets and New Testament apostles. The stained glass windows in the south transept of Chartres Cathedral, completed about 1220–6, include four compositions of evangelists raised on the shoulders of prophets.³² A comparable iconographic program adorns the twelfth-century baptismal font from the church of Saint Thomas in Neumarkt, now in the cathedral of Merseburg (Figure 4.13). In twelve arcaded niches, figures of New Testament apostles perch on the shoulders of their tall and slender typological counterparts. Inscriptions chiseled into the arches above the apostles' heads and on the scrolls held by the prophets identify the pairs of Old and New Testament figures.³³ A further example is the so-called Prince's Portal (Fürstenportal) of the cathedral of Bamberg (ca. 1225), which features two symmetrical rows of six Old Testament prophets with apostles standing on their shoulders (Figure 4.14).³⁴ The apostles are vertically stacked atop the prophets, with each group carved from a single block of stone to underscore the relationship of succession and fulfillment between prophets and apostles.³⁵

Whereas these examples are geographically remote, thirteenth-century Roman viewers had access to at least one local example of the iconographic scheme. The little church of Santa Maria in Pallara on the Palatine Hill featured on its apse wall a series of apostles atop the shoulders of prophets. The frescoes, now in poor condition, were recorded in pen and watercolor by the seventeenth-century artist Antonio Eclissi; these drawings show rows of painted figures on either side of the central apse.³⁶ The upper of two registers included twelve figures from the motif of the twenty-four elders (Revelation 4:4), a common feature on Roman apse arches, while the lower register displayed the typological configuration of Old Testament prophets standing upright with haloed apostles seated on their shoulders (Figure 4.15).

The widespread dissemination of the prophet–apostle scheme can be attributed to the didactic clarity with which it encapsulated the typological harmony between the Old and New Testaments. Typology, an eighteenth-century term for an exegetical method developed in the early Christian period, was an interpretive strategy that read biblical events as figures in order to highlight how Old Testament events foreshadowed, and became more fully realized in, subsequent events in the New Testament. At its most basic level, typology was the study of prefigurations and their fulfillments, which mirrored each other across the dividing line established by the birth of Christ. This straightforward principle, as Friedrich Ohly lucidly demonstrated, could be expanded to allow exegetes to illuminate meaningful relationships not only between historical events but also between institutions, persons, and things.³⁷ The broad



4.13. Twelfth-century baptismal font from church of Saint Thomas in Neumarkt, showing prophets carrying apostles on their shoulders; now in Merseburg Cathedral. Photograph: Hoger / Wikimedia Commons.

areas of application for figural interpretation in the medieval period suggest that typology approximated a cognitive paradigm, a distinctive mode of thought that sought to make sense of history in non-chronological and figurative ways.³⁸



4.14. “Prince’s Portal” (Fürstenportal) on north side of nave, ca. 1225, Bamberg Cathedral. Photograph: Reinhold Möller / Wikimedia Commons.

The cycle of virtues and vices in *Santi Quattro Coronati* explores typology as a structural method for organizing history within a system of moral law. By combining two established pictorial motifs – trampling, to express contrary relations, and raising on shoulders, to express complementary relations – the mural cycle creates a sophisticated pictorial psychomachia. More specifically, the configurations of virtues employ the logic of typology to articulate complementary relationships between figures who belong to different realms of signification: for example, between a historical character such as Peter and an



4.15. Seventeenth-century watercolor by Antonio Eclissi showing apse arch of Santa Maria in Pallara. Biblioteca Apostolica Vaticana, Vat. lat. 9071, pp. 234–5. Photograph: Vatican Library.

anthropomorphized abstraction like *Karitas*. At the same time, the paintings establish counter-typological relationships in which the principle of fulfillment is substituted for one of subversion or moral conquest. In contrast to the conventional prophet–apostle scheme, which relies on the matching of two historical characters, the pairing of saint with virtue and of sinner with vice introduces a level of complexity that blurs the boundaries between history and allegory.

The four compositions on the east wall are well suited to a closer analysis of how the paintings combine personifications and historical figures in the same pictorial world. Peter is paired with Nero, Jerome with Alexander, Francis with Julian the Apostate, and Dominic with Simon Magus – all historical characters whose relationship across time is one of moral antithesis.³⁹ Nero and Peter constitute the only counter-typological pairing between historically contemporaneous characters; all other compositions pose saints against chronologically disparate sinners (see Figure 4.5). To be sure, the pairing of Peter and Nero would have resonated meaningfully in the contemporary political climate dominated by the struggle between the pope, Peter’s heir, and Emperor Frederick II, who was frequently characterized by the papacy as the Antichrist.⁴⁰ In terms of the compositional logic of the painted cycle, however, the fact that Peter and Nero were historical contemporaries is of only secondary importance, because the primary function of the historical figures is to present a series of moral truths that exist beyond the particulars of history.⁴¹

Temporal distance is accentuated in the matching of the thirteenth-century saints Dominic (1170–1221, canonized 1234) and Francis (1181–1226, canonized 1228) with the New Testament figure Simon Magus and the fourth-century Julian the Apostate, respectively (Figures 4.7 and 4.8). The paintings’ original audience may have been particularly sensitive to the temporal contrast between the two historical figures and the contemporary mendicants.⁴² In addition, the composition of *Amor Celestis* with Francis, Julian, and *Amor*

Presentis Saeculi incorporates the tension between the historically specific and the ahistorical in its overall ethical theme. Here, Julian the Apostate is included as the historical example of “love of the present era,” presumably for his rejection of Christianity and attempt to bring back the gods of antiquity.⁴³ Francis, by contrast, is paired with *Amor Celestis* for his love of the spiritual and eternal and his rejection of the mundane. Thus, in the typological pairing of Francis and Julian, there emerges a tension between the figures’ historical identities and their ethical valuation. Francis, who from a mid-thirteenth-century perspective was a present-day human being, is effectively memorialized in the mural program as an “apostate” of the “*presentis saeculi*.”

The images of Francis and Dominic in Santi Quattro Coronati are among the earliest preserved depictions of these mendicant founders.⁴⁴ Their inclusion attests to the papacy’s interest in appropriating the two charismatic saints and their respective orders, which were exerting a profound impact on contemporary society.⁴⁵ Above all, the presence of two near-contemporary saints draws attention to the distinctive manner in which the cycle combines a broad historical scope, reaching from biblical times to mid-thirteenth-century Italy, with an intentional disregard for historicity and narrative continuity.⁴⁶ Throughout the cycle, the incorporation of textual excerpts and images of named saints and villains can be seen as a way of reinserting historically specific information into a predominantly allegorical cycle. By including these historical facts, the frescoes attempt to transform the psychomachian theme, traditionally conceived as a spiritual conflict taking place in the soul, into a panoramic image of the continuous battle between the church and its enemies taking place in history.

Importantly, the cycle shows this moral battle as if from a vantage outside of historical time. The deliberately anachronistic positioning of figures in oppositional and complementary pairs makes clear that the goal is not to represent history as a linear series of events but, instead, to outline history’s underlying design of fulfillment. Therefore, the true content of the cycle is in some ways its diagrammatic structure, which can be seen as an attempt to depict typology as a distinctive mode of thinking about history rather than history as such.

LEGAL RHETORIC AND THIRTEENTH-CENTURY POLITICS

Visitors entering the great hall through the main doorway were greeted by the figure of Solomon centered on the north wall (Figure 4.16). The youthful king wears a type of ceremonial armor that evokes portraits of Ancient Roman emperors. A large seventeenth-century window has truncated the lower half of the figure. Originally, Solomon was flanked by two significantly smaller windows: The one on the right was topped by a peacock with splayed tail feathers, and the one on the left by a vase and two large birds. The king’s



4.16. King Solomon flanked by exotic birds, ca. 1244–54, north wall of north bay, cardinal's residence, Santi Quattro Coronati, Rome. Photograph: Reproduced under license from Ministero della Cultura – Vittoriano e Palazzo Venezia.

proportions suggest that he stood atop a prostrate figure, perhaps another character from the Old Testament whose qualities were considered antithetical to his own. As a focal point on the north wall, Solomon encapsulates many of the central themes addressed by the great hall's pictorial program. To his medieval interpreters, he epitomized wisdom and jurisprudence: His sagacity was earthly yet divinely inspired; he had presided over a prosperous kingdom and a resplendent court; he had been a builder of magnificent temples; and he was a writer of poetry, song, and philosophy.⁴⁷ The biblical monarch was therefore a suitable model for the new generation of erudite rulers that emerged in the thirteenth-century Mediterranean. Secular rulers of the period, including Frederick II and Alphonso X of Castile, styled themselves as “new Solomons” in efforts to promote the breadth of their learning and their generosity as patrons of artists, scientists, and translators.⁴⁸ The biblical king appears to have played a similar role in the political thought of the papacy. Pope Innocent III, who ushered in a new period of cultural flowering at the papal court, was sometimes flatteringly referred to by his curial admirers as “Solomon III.”⁴⁹ The central position afforded Solomon at Santi Quattro Coronati is indicative of the ways in which the papacy viewed its own monarchic rule as defined by the mastery of worldly and religious knowledge. It also suggests the increasing importance of jurisprudence within the papacy's repertoire of governing tools. If the virtues cycle visualizes how divine law, understood as the covenant between God and his followers, operates through human characters and across history, then the figure of Solomon directs

attention to the papacy's self-perception as the institutional embodiment of civil and canon law in the context of thirteenth-century politics.

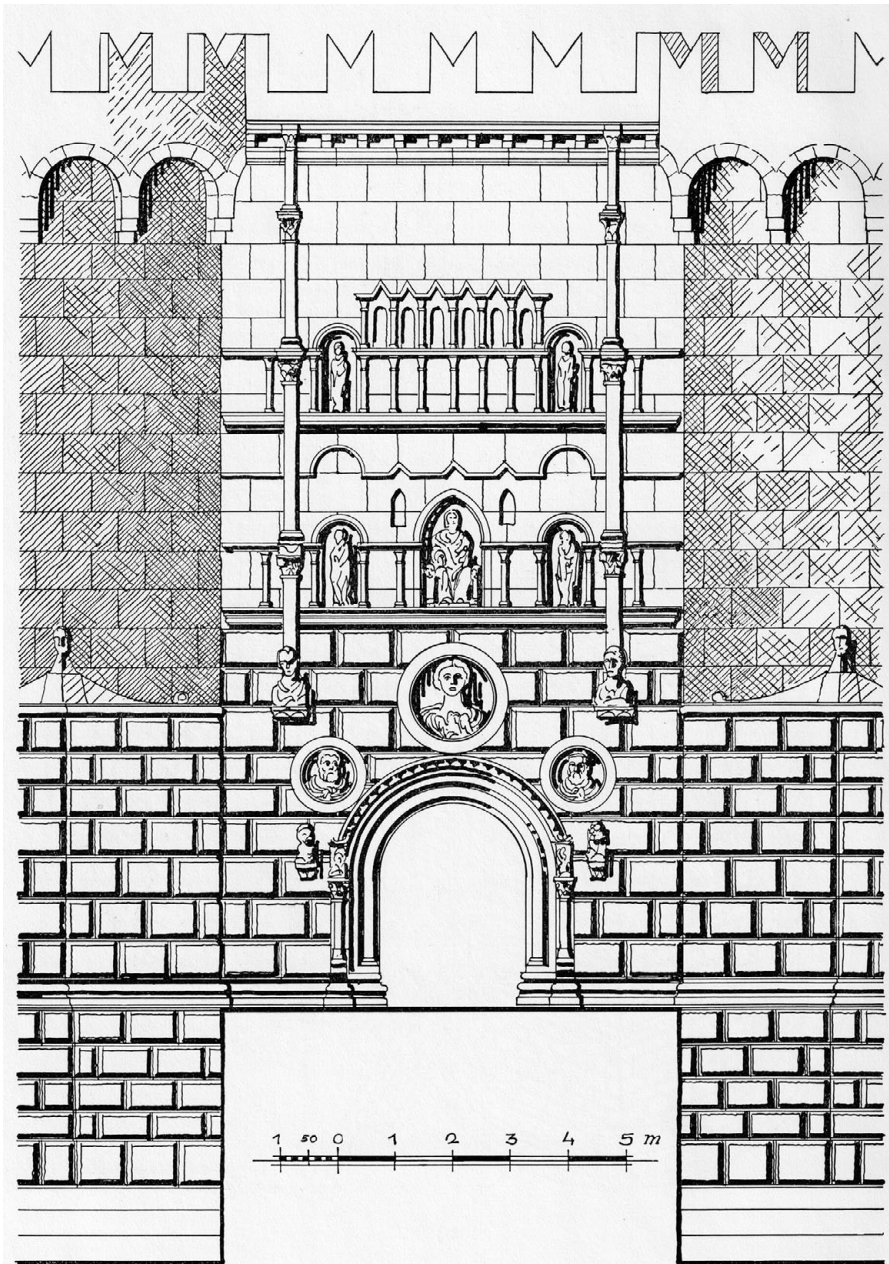
Andreina Draghi has aptly argued that Solomon should be understood as a surrogate for Justice (*Iustitia*) in the cycle of virtues and moreover that the figure's prominent placement in the fresco program suggests the possible function of the great hall as a site for the administration of justice.⁵⁰ The fact that Stefano Conti is known to have served as papal auditor for much of his curial career – as did Cardinal Ottaviano degli Ubaldini, who resided at Santi Quattro Coronati after Conti's death – supports the view of the great hall as a location for papal tribunals.⁵¹ If accurate, the frescoed Solomon with his entourage of personified virtues would have created a thematically apposite setting for such proceedings. A pertinent analog to the Santi Quattro Coronati figure is found at the south portals of Strasbourg Cathedral, where an enthroned Solomon sits at the center of a sculptural program dating to the 1240s, which included Mariological stories and enthroned statues of *Ecclesia* and *Synagoga* (Figure 4.17). Centered between two doorways, Solomon wears a crown and holds a sword in his lap; above him, a bust-length image of Christ holds a globe. The sculptural group accordingly conveys a theme of divinely inspired justice, echoing the biblical proclamation that Solomon's wisdom had descended directly from God.⁵² At the base, a narrative scene references the well-known story of Solomon's judgment; on the left, a woman clasps a dead infant to her waist while attempting to snatch another woman's living child. Recounted in the first book of Kings, the biblical story was the anchor point for Solomon's association with jurisprudence. According to the tale, two women who lived together in a brothel had each given birth to a son, and after one of the infants died from suffocation, both mothers appeared before Solomon to claim the living child.⁵³ Seeking to extricate the truth of the matter, the wise king called for the living infant to be cleaved in two and divided among them. Upon hearing this stark judgment, one of the women agreed to the preposterous slaughter, while the other renounced her claim on the child in order to save his life, thus proving herself to be the rightful mother. The story appeared quite frequently in illuminated psalters and Bibles of the thirteenth and fourteenth centuries, as well as being included in the sculptural program of Chartres' north portals and in the stained glass windows of Strasbourg Cathedral.⁵⁴

At Strasbourg, the sculpted Solomon effigy established a fitting backdrop for the town's public law court. Nina Rowe has shown that the public site before the south portals functioned as an outdoor courtroom where members of the local bourgeoisie and high-ranking clerics would hear legal cases.⁵⁵ Rowe has furthermore argued that, in the eyes of contemporary Strasbourgeois, the enthroned Solomon would have evoked the empire's supreme ruler, Frederick II.⁵⁶ Around the time that the portals were created, the emperor



4.17. Sculptural ensemble on south façade of Strasbourg Cathedral showing Christ Pantocrator (above), King Solomon (middle), and the judgment of Solomon (below), original dated to the 1240s. Current sculptures are replicas by Jean Vallastre, created in 1827. Photograph: Tangopaso / Wikimedia Commons.

was actively promoting his image as chief justice and lawmaker by issuing new legal codes, sponsoring public artworks, and presiding over court cases in person.⁵⁷ For example, Frederick's new collection of laws known as the Constitutions of Melfi, issued in 1231, presented the sovereign as not only the guardian of justice but its origin and human embodiment.⁵⁸ Moreover, in



4.18. Reconstruction of the Capuan gateway. Drawing reproduced from Carl A. Willemssen, *Kaiser Friedrichs II. Triumphator zu Capua*, Wiesbaden: Insel-Verlag, 1953, fig. 106, with permission from Suhrkamp Insel-Verlag AG.

1234 he commissioned a triumphal gateway at the river crossing leading into the southern Italian city of Capua, which was devised as a colossal advertisement for the role of justice in the Holy Roman Empire (Figure 4.18).⁵⁹ The ideological program of this fortified gate is known primarily from verbal

descriptions and sixteenth-century drawings, which show classicizing architecture combined with a sculptural organization modeled on representations of the Last Judgment. At the apex, Frederick sat on a throne above a large classicizing roundel with a bust-length image of *Iustitia*. This personification of justice was in turn flanked by two smaller roundels that portrayed the two chief justices of the imperial court, Pietro della Vigna and Taddeo da Sessa. The emperor's effigy evoked both Solomon, the wise earthly ruler, and Christ, the divine judge. As such, it portrayed Frederick as the erudite monarch and human mediator between divine and terrestrial law. Thirteenth-century travelers approaching Capua from the north would accordingly have been greeted by a self-aggrandizing vision of a Christian empire modeled on the splendor of Roman antiquity and ruled by a sovereign who conceived himself as the epitome of justice and royal erudition.

The cultivation of jurisprudence by the secular and ecclesiastical elite of the thirteenth century reflects the changing role of legal knowledge in the realm of politics. The papacy and its secular rivals increasingly employed law reform as an instrument of power, and crucial battles between lay and church power were fought in legal terms. Over the course of the thirteenth century, the papacy instituted a vast program of collecting and systematizing previous rulings and decretals into a new set of law books that would have an enduring impact on canon law for centuries.⁶⁰ Under Pope Honorius III (1216–27), the papacy had moved to diminish imperial control over the faculty at Europe's premier law school, the University of Bologna, which had been the center for study and reform of Roman civil law since the eleventh century.⁶¹ The papacy also revamped its papal tribunal, a complex system of appeals that served as a legislative tool for creating new laws and precedents. The tribunal moreover constituted a significant source of income for cardinals and the Curia's growing staff of lawyers and notaries.⁶²

The thirteenth-century papacy's investment in legal knowledge along with its strategic deployment of legalistic propaganda against imperial adversaries accounts for the central role afforded Solomon in Cardinal Conti's fresco cycle. The Curia's interest in weaponizing legal rhetoric for political purposes also casts new light on the use of written documents in the cycle of virtues and vices. To be sure, the scrolls held by the virtues and vices played manifold roles within the painted ensemble. In addition to endowing personifications with the capacity of speech, the parchments contextualized each constellation of figures by anchoring their meanings in scriptural and classical source materials. Yet, in the context of a cycle devoted to justice, each scroll also functioned rhetorically as a legal precedent. Each citation and paraphrase were displayed as a form of "supporting evidence" in a broad moral and political case brought by the church against its perceived enemies. Take, for example, the scroll held by the virtue Charity (*Karitas*), which paraphrases Paul's discourse on the law (1

Romans 13:8) to contrast the perceived illegitimacy of imperial power with the perceived righteousness of divine law, as fulfilled through acts of love (see Figure 4.5). Here, as elsewhere in the cycle, the text on the scroll is presented as evidence for the subversion of power represented in the image. Taken together, text and image proclaim that Nero's Roman law, under which Peter's execution could be justified, was itself based on the unjust principle of hatred (*Odium*) for one's neighbor; furthermore, that unjust law is now superseded by the law of God, which teaches love (*Karitas*) for even the most venomous of one's neighbors: "LEGEM QVAM VIVES SI FRAT(R)E(M) DILIGIS INPLES."

The parchment scrolls in the virtues cycle could draw on an existing artistic practice wherein visual representations of documents were mobilized as reminders of extant legal agreements along with the norms and institutions that upheld those agreements. This "documentary mode of representation," as Jessica Berenbeim has termed it, was deployed in Callixtus II's frescoes celebrating the Concordat of Worms in the medieval Lateran Palace, and in mural decorations memorializing the famed legal charter known as the Donation of Constantine.⁶³

Less consequential documents, too, were on occasion rhetorically empowered through visual display and magnification. For example, at the Benedictine monastery at Subiaco, an early thirteenth-century fresco highlighted the perceived efficacy of documents by representing a magnified papal deed as the central image of a large rectangular triptych (Figure 4.19).⁶⁴ In this instance, the frescoed charter was a greatly enlarged copy of a letter received by the monastic community in 1203 from Pope Innocent III, which documented the pope's bestowal of six pounds in silver to be granted on an annual basis and in perpetuity. In the fresco, Innocent stands at the far right with both hands on the large parchment sheet. On a throne at the left sits Saint Benedict, the monastic community's founder and the grant's symbolic beneficiary. Kneeling at the feet of Benedict's effigy is the monastery's abbot, Romano, who was the grant's actual recipient and the presumed sponsor of the fresco.⁶⁵ The magnified charter played a dual role in the Subiaco fresco: It promoted the monastery's close ties to the papacy by recording Innocent's pledge as an historical event; and it offered a conspicuous reminder of the terms stipulated by the deed – namely, that the gift was to be received yearly and until the end of time.

The scrolls in Cardinal Conti's virtues cycle operated with a comparable documentary rhetoric but were designed to participate in a political polemic with substantially higher stakes. To a contemporary audience, the parchment scrolls would likely have been viewed in the context of the papacy's tumultuous power struggle with the Emperor Frederick II in the 1230s and 1240s. A substantial portion of this political conflict was fought in the arena of public opinion, with the two sides issuing broadsheets alleging heresy and violations

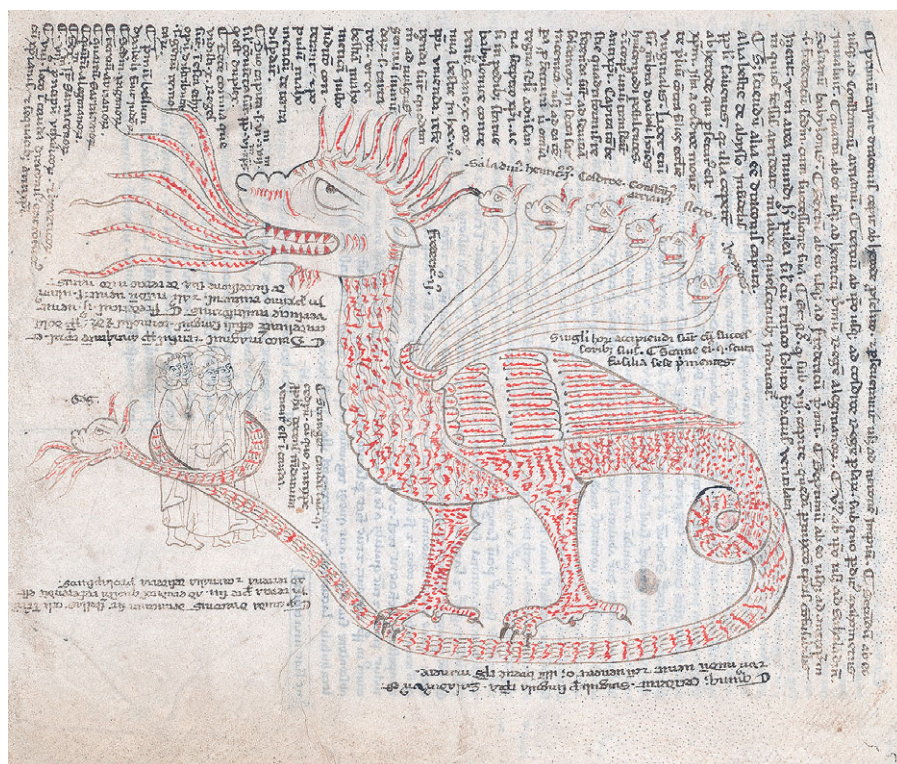


4.19. Lower part of image shows frescoed charter with Pope Innocent III (right) and Abbot Romano kneeling in front of an effigy of Saint Benedict (left), ca. 1216. Upper lunette shows Master Consolo's portrait of Pope Innocent III created in the second half of the thirteenth century. Monastery of Sacro Speco, Subiaco. Photograph: Author.

of legal precedent.⁶⁶ In these so-called pamphlet wars, both rulers – aided by their eloquent orators, Cardinal Thomas of Capua and the imperial lawyer Pietro della Vigna – mined the history of imperial–papal relations to validate their respective charges.⁶⁷ In the wake of Gregory IX's second excommunication of the emperor in 1239, this propaganda war reached a cacophonous climax as the imperial and papal chanceries issued circulars that, much like the frescoed cycle of virtues and vices, utilized classical and biblical allusions to present their arguments in moral and predestinarian terms as a battle between good and evil. For example, Gregory's chancery circulated letters identifying Frederick variously as the Antichrist and the beast of Revelation who had emerged from the sea to destroy the world and the Christian faith.⁶⁸ The

imperial court responded with its own circulars in which Frederick claimed to be Christ's earthly agent while casting the pope as both a Pharisee and an embodiment of the devil.⁶⁹ In other words, both sides framed the conflict as an apocalyptic struggle and designated their opponent as a threat to creation's divinely designed order. Conti's virtues cycle presented the history of Christianity in remarkably similar terms, as an epic contest between the forces of evil and good (vices and virtues), and between agents of chaos and representatives of cosmic order (villains and heroes).

The papacy's choice to frame its struggle with Frederick in eschatological terms is reflected in the selection of historical malefactors in the virtues frescoes.⁷⁰ In medieval Christian thought, characters such as Pharaoh, Nero, Simon Magus, and Muhammad were widely understood as historical agents of chaos: that is, they constituted (some of) the manifold aspects assumed by God's antithesis, the Antichrist, in the course of history.⁷¹ In this perspective, frescoed villains in the virtues cycle were human versions of the supernatural chaos monsters described in the scriptures.⁷² The most prominent of these beings was the sinuous sea dragon Leviathan, a primordial chaos creature who dwelled in – and personified – the unpredictable sea (Job 41), who had abducted Jonah (Jonah 1–2), and whose carcass would apparently be served at an eschatological banquet following the court proceedings at the end of time.⁷³ That the Santi Quattro Coronati frescoes were designed to stimulate this form of apocalyptic thinking is largely confirmed by the pairing of Pharaoh with Job in the image of *Patientia* (Figure 3.24).⁷⁴ Ezekiel's prophecies against Egypt had portrayed Pharaoh in the shape of Leviathan, as “the great dragon that lies in the midst of his streams.”⁷⁵ The Book of Job was moreover the principal locus for understanding the image of the sea monster in the context of God's battle against the forces of chaos.⁷⁶ Accordingly, the frescoed scroll held by *Ira* (Wrath) cites the “Song of Moses,” which extols the way in which God had subdued chaos by thrusting the sea aside and causing its demigod Pharaoh to be “swallowed by the earth.”⁷⁷ The cited passage paralleled other scriptural verses that portrayed God's continual contest with forces of chaos, including Psalm 74: “You divided the sea by Your might; You broke the heads of the sea monsters on the waters. You crushed the heads of Leviathan.”⁷⁸ Viewers of the fresco could therefore perceive in the image of *Patientia* an example of the biblical God's superior power over the gods of neighboring nations, which to contemporary eyes could be cast in terms of current political circumstances. Thirteenth-century apocalyptic speculation frequently interpreted Frederick II as the most recent incarnation of the dragon Leviathan. In addition to Gregory IX's portrayal of the emperor as the beast rising from the sea, Salimbene di Adam (ca. 1221–90), a prophetic writer and follower of Joachim of Fiore, interpreted Frederick as the dragon of the apocalypse who “would confound the world and trample on the saints of God.”⁷⁹ The



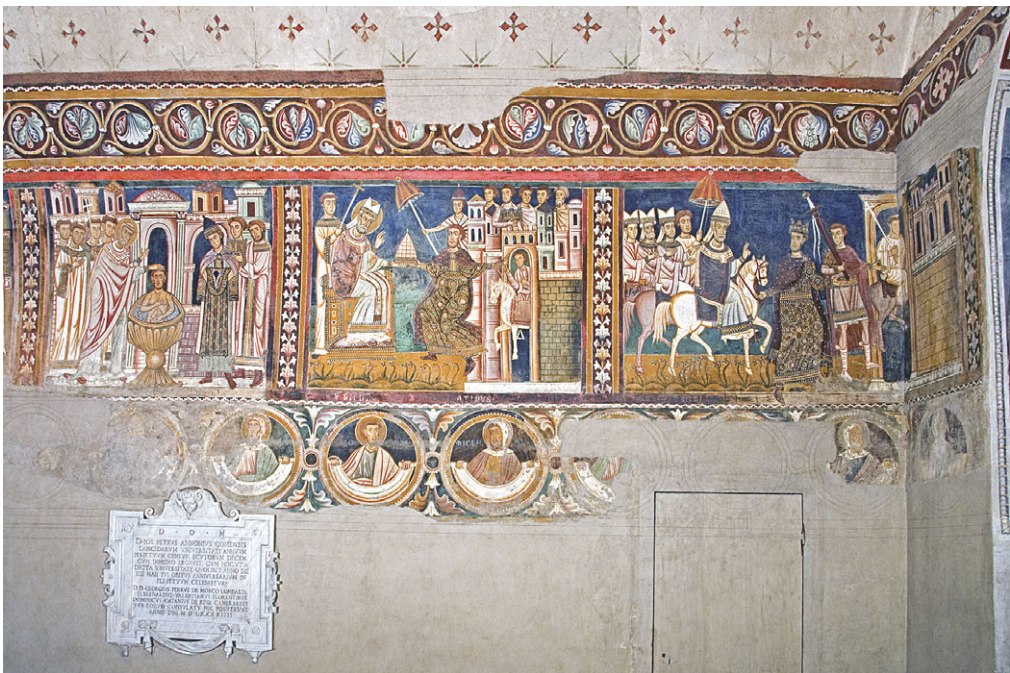
4.20. Frederick II as the seven-headed dragon of the apocalypse, ca. 1300. Biblioteca Apostolica Vaticana, Vat. lat. 3822, fol. 5r. Photograph: Vatican Library.

widespread interpretation of Frederick and his secular predecessors as incarnations of Leviathan was compellingly captured in a manuscript illumination of about 1300 accompanying an eschatological commentary on Isaiah (Figure 4.20).⁸⁰ There, the largest head of a flame-spewing dragon was labeled “Fredericus II,” while the six smaller heads protruding from its scaled neck were identified chronologically from left to right as the Ayyubid ruler Saladin, the papal foe Henry IV, the Persian King Khosrow II, Constantius II “The Arian,” Nero, and Herod.⁸¹

The propaganda war between pope and emperor was also waged in more technical, legalistic language. To defend their respective claims to secular power, both sides turned particularly to the famed Donation of Constantine, a forged legal charter drafted in eighth- or ninth-century Rome that described the emperor’s alleged surrender of the western half of his empire to Pope Sylvester and his successors.⁸² For example, in a letter to Frederick written in 1236, Gregory IX argued that Constantine had granted the pope “primacy over things and bodies in the whole world,” and so there could be no question as to the supremacy of papal jurisdiction in spiritual and temporal matters.⁸³ To these charges, the imperial court responded with a diametrically opposed

interpretation of the Donation, arguing that, since it had been the emperor's prerogative to bequeath power to the pope in the first place, it followed that Constantine's successor (i.e., Frederick) was entitled to reclaim that power from Sylvester's successor (i.e., Pope Gregory), should he wish to do so.⁸⁴

The frescoes created for Stefano Conti's Sylvester Chapel participated in this propaganda war by narrating the papacy's view of the Constantinian benefaction.⁸⁵ Here, the two most politically charged scenes of the cycle align closely with the text of the Donation. The charter relates that, after Sylvester had healed Constantine's leprosy with the waters of baptism, the emperor granted the pope the right to wear the purple robe and the imperial diadem, along with other imperial insignias. The Donation also claimed that Constantine had agreed to offer a public demonstration of the power transfer by leading the pope's horse by its bridle in the manner of a humble servant, a symbolic act known as the "office of the groom" (*officium stratoris*). The chapel frescoes proclaimed the veracity, as well as the significance, of these events. In the Donation scene, Sylvester sits on the papal throne in full ceremonial attire while a subservient Constantine hands him the tiara as a symbol of temporal power (Figure 4.21). The subsequent scene shows a swordless emperor walking the pope's white horse, with the pope in the saddle, toward the



4.21. Detail of fresco cycle in Sylvester Chapel showing Donation of Constantine (left) and Constantine leading Sylvester to the Lateran Palace (right), ca. 1246–7, Sylvester Chapel, Santi Quattro Coronati, Rome. Photograph: Courtesy of Lia Barelli and the Monache Agostiniane di Santi Quattro Coronati.



4.22. Donation of Constantine reproduced in seventeenth-century drawing of lost mosaic decoration in portico of Lateran Palace. Biblioteca Apostolica Vaticana, Barb. lat. 4423, fol. 14r. Photograph: Vatican Library.

new papal residence at the Lateran. Thirteenth-century viewers were clearly meant to interpret these frescoes in light of the contemporary power struggle between the papacy and Frederick II.

The Donation had gained new relevance about a century and a half earlier when the charter was codified as canon law in response to the ecclesiastical–political conflict known as the Investiture Controversy.⁸⁶ In the aftermath of this struggle, the Constantinian charter was celebrated in a mosaic program installed in the portico of the Lateran basilica.⁸⁷ Among three episodes from the life of Sylvester was a narrative panel organized around Constantine’s deed as a physical document (Figure 4.22). A seventeenth-century drawing conveys the mosaic’s compositional arrangement, showing a supplicant Constantine handing a scroll to Sylvester, who presides in regal splendor beside the Lateran basilica. An inscription explains the document’s purpose: “*Rex in scriptura Sylvestro dat sua iura*” (The king hands Sylvester his rights in the document).⁸⁸ As with the *Santi Quattro Coronati* frescoes, there could be little doubt about the image’s political message: Constantine genuflects before the majestic pope to signal his newly subordinate status in relation to Sylvester. While the scene’s placement within a sequence of hagiographical stories made a case for the historical veracity of the fourth-century event, the charter was presented as an object of enduring power. The fully unfurled scroll suggested to beholders that the emperor’s bestowal was preserved in the form of a legal agreement and recorded on a physical document. The mosaic’s prominent display of the

charter was an argument for the continued validity of Constantine's historic power transfer from the fourth century and into the image's twelfth-century context.

The propagandistic function of Constantine's deed on the Lateran portico was likely inspired by the representation of the Concordat of Worms in the frescoes commissioned by Calixtus II for the audience hall of the Lateran Palace (see [Figure 4.12](#)).⁸⁹ As we have seen, the victorious Calixtus was depicted with feet resting on the antipope Gregory VII and displaying a long scroll whose text outlined the new arrangement over ecclesiastical investitures worked out between the papacy and Henry V. Although the actual Concordat of Worms involved significant concessions from each side, the frescoes presented the agreement as a clear victory for the papacy. The Lateran images portrayed the pope centered, resplendently enthroned, and accompanied by a large entourage; by contrast, the emperor stood to the side, attended by only a single knight. Furthermore, the scroll represented in the frescoes offered a misleading interpretation of the concordat; it highlighted only those rights conceded by Henry on the question of investiture so as to characterize the political compact as a triumph for Calixtus II. This intentional reframing of a complex legal agreement reinforced the broader message of papal triumph expressed by the mural's sequence of victorious popes and defeated antipopes. For the Roman papacy, it also underscored the tantalizing propagandistic potential of visually represented documents in its mounting array of anti-imperial imagery.⁹⁰

The two Constantinian murals and the audience hall fresco mobilized written documents as instruments of political power. As such, they expanded the roles played by scrolls in medieval art beyond their conventional uses as attributes of Old Testament prophets, as signs of authorship, and as symbols of liturgical rituals.⁹¹ The murals presented Constantine's Donation and the Concordat of Worms as authoritative objects with actual power to control circumstances in the world.⁹² Viewed through this lens, the two charters were not merely historical records of previously reached agreements but were also understood as authenticators and executors of those agreements. The inscribed parchment scrolls populating the cycle of virtues and vices were endowed with a comparable rhetoric of documentary authority. The frescoes' sponsor, Stefano Conti, was a seasoned auditor of the papal tribunal; as such, he likely had a meaningful appreciation for the perceived power of written documents. Furthermore, Conti spent much of his life and curial career enmeshed in the papacy's complex dealings with Frederick II. His papal uncle, Gregory IX, had been at loggerheads with the emperor throughout his fourteen-year reign; and by the time the Santi Quattro Coronati frescoes were being painted, the current pope had fled Rome, leaving Stefano in charge of defending the city against Frederick.⁹³ It appears quite likely, therefore, that the psychomachian frescoes were meant to be viewed ideologically, as a moral pendant to the

argument for papal power represented in the Sylvester Chapel frescoes. The crushed villains, from Nero and Muhammad to Julian the Apostate and Alexander, are all in some sense precursors to the emperors of the thirteenth century. Seen in relation to their political context, the frescoes offered the aspirational argument that the papacy was destined to overcome its current foes in the same manner that it had defeated its enemies of old. With Frederick's troops encamped outside the city walls, the virtues cycle with its gallery of defeated secular rulers and apostates offered an epic and eschatological lens through which courtly viewers could contemplate the seemingly cataclysmic events that were unfolding before their eyes.

ALLEGORY AND HISTORY

The complex interrelations between historical *exempla* and personifications in Conti's virtues cycle invite further consideration of the treatment of allegory and history in Prudentius's *Psychomachia*. As the first sweeping allegorical poem of the Christian era, the lyric served as a model for a number of later allegories, and a reference point for visual artworks centered around the struggle between good and evil. In addition to personification, the poem made frequent use of typological allegory and was clearly meant to be read through the interpretive lens of biblical exegesis.⁹⁴ Allegory – literally, “to speak otherwise” – had been defined by the ancient orator Quintilian as a figure of speech that produces twofold meaning, one that is literal and resides on the surface, and one that hides beneath.⁹⁵ In its medieval Christian usage, allegory came to be understood as a scriptural mode of meaning production; it was allegedly the technique God had used to embed sacred interpretations in the subtextual crevices of biblical stories.⁹⁶

Augustine offered the first rigorous treatment of allegory's usefulness for biblical exegesis, focusing particularly on the perceived tension between history and allegory.⁹⁷ The term *allegory*, he found, appeared to sow unhelpful doubt about the historical reality of biblical events. This was particularly the case for Old Testament stories, which some early Christian theologians had proposed to interpret in a purely allegorical manner as though they were mythological tales.⁹⁸ Augustine, by contrast, insisted that the events and persons of the Old Testament were both historically factual *and* prefigurations of events and people in the New Testament. To describe this relationship, he came to prefer the term *figura* over *allegoria* for its capacity to embrace the scriptures' historicity while simultaneously pointing beyond itself to deeper levels of significance.⁹⁹ *Allegoria* could still be used in more restricted ways, for example to describe the figurative meanings of biblical utterances; if used haphazardly, however, it might encourage readers to reduce the peoples and happenings of the old books to mere signification.

The paintings of the north bay engage in an analogous interrogation of allegory as a distinctive mode of signification and medium for knowledge transmission. With their intermingling of two ontologically different kinds of figures, the murals probe the relationship between visual forms and their meanings. As such, they invited beholders to reflect on the epistemic potential of painting and, more specifically, on the capacity of painted personifications to effectively convey their intended referents. In taxonomic terms, the cycle comprises two categories of figures – historical and allegorical – with the personified virtues and vices forming the primary level of signification and the saints and sinners defining a secondary register.¹⁰⁰ The peculiar intrusion of historical personages into the primary allegorical level produces a measure of complexity that sets the Santi Quattro Coronati paintings apart from many earlier psychomachian cycles. Most prior virtues cycles depicted the triumph of good over evil in comparably strict allegorical terms, as personified virtues paired with personified vices.¹⁰¹ Such schemes enclosed personifications within a single semantic register in a manner that corresponded to the narratological arrangement encountered in Prudentius's *Psychomachia*.

In his inspired analysis of Prudentius's poem, James Paxson identified two distinct narrative levels in the text's structure.¹⁰² Whereas many canonical medieval allegories allowed personifications and human characters to interact freely, the *Psychomachia* is unique, Paxson argued, because all personified figures "are entirely contained in the primary diegetic field of authorial narration." Human characters appear only within "a second or metadiegetic level of narrative," defined by the series of set speeches performed by the virtues after their successful conquests of the vices. The biblical stories recounted in these speeches appear as "embedded narrations" within the poem's primary narrative level and were clearly chosen for their thematic resonance with the preceding allegorical battles.¹⁰³ For example, after *Spes* (Hope) has defeated and beheaded *Superbia* (Pride), the virtue recounts the story of David's battle with Goliath; after defeating *Libido* (Lust), *Pudicitia* (Chastity) tells the story of Judith and Holofernes; and *Sobrietas* (Sobriety), after slaying *Luxuria* (Luxury), recounts the story of Jonathan and the honeycomb.¹⁰⁴ These biblical anecdotes function as real-world examples of the spiritual struggles fought by the personifications; they isolate particular moments when timeless moral principles were acted out in sacred history.

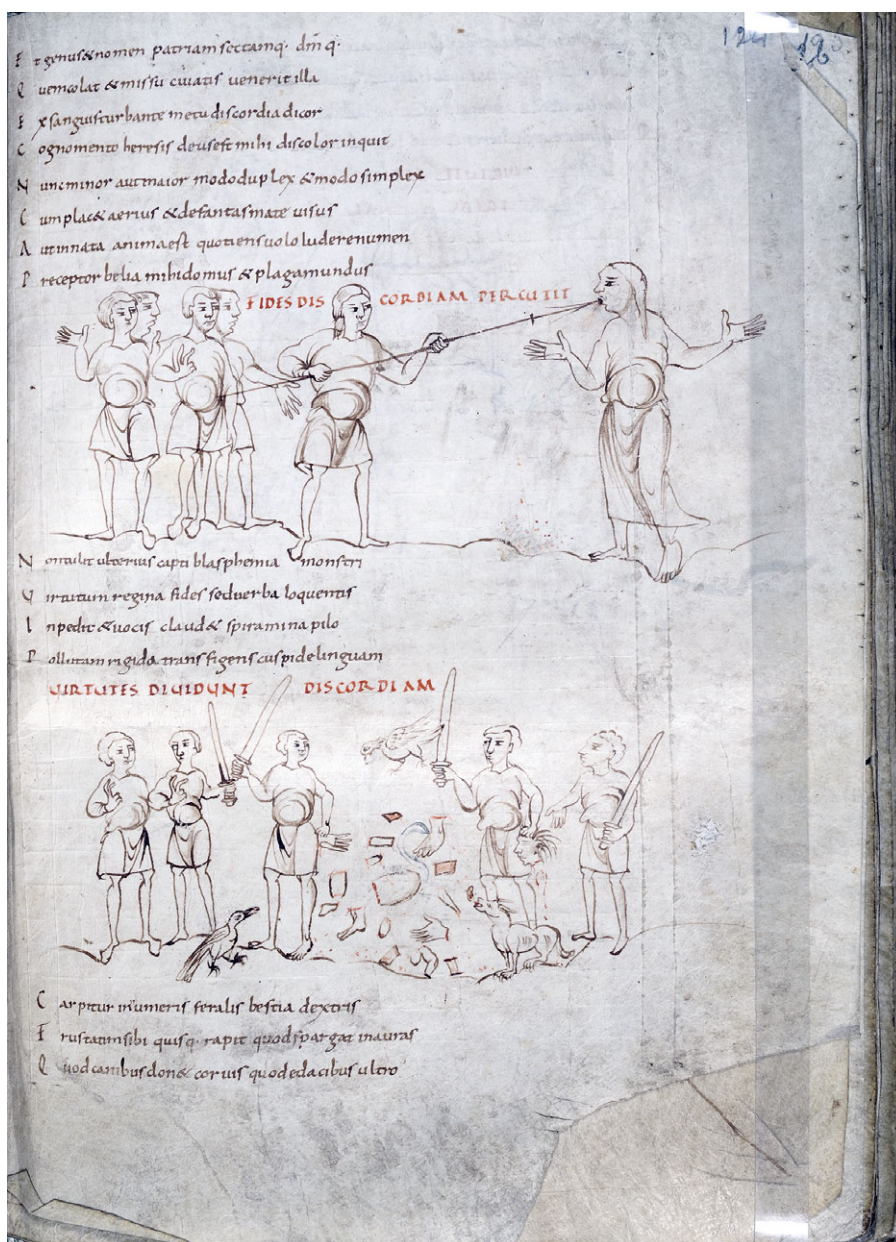
Within this orderly narrative structure, Prudentius provided manifold occasions for readers to reflect on personification allegory, or prosopopoeia (literally "person-making"), as a poetic tool for representing abstract ideas.¹⁰⁵ These are found particularly in the grisly battle scenes where the destruction of the vices' faces and bodies functioned metaphorically as assaults on personification as a poetic device. An example is the mutilation of *Heresis* (Heresy) toward the end of the poem. After discovering that Heresy has slipped into their group disguised as a friend, the virtues proceed to utterly dismantle the infiltrator's

body. The graphic dismemberment served, among other things, as a poetic unmasking of Heresy's symbolic meaning:

No further did Faith, the Virtues' queen, bear with the outrageous prisoner's blasphemies, but stopped her speech and blocked the passage of her voice with a javelin, driving its hard point through the foul tongue. Countless hands tear the deadly beast in pieces, each seizing bits to scatter to the breezes, or throw to the dogs, or proffer to the devouring carrion crows, or thrust into the foul stinking sewers, or give to the sea-monsters for their own. The whole corpse is torn asunder and parcelled out to unclean creatures; so perishes frightful Heresy, rent limb from limb.¹⁰⁶

In this passage, the author imagined the vice's punishment as tailored to her crime following the principle of retributive justice, or *lex talionis*.¹⁰⁷ Heresy sows disunity in the church, and so she is punished by having her body literally "disunited" by the virtues.¹⁰⁸ Moreover, as Paxson points out, the literal dismemberment doubled as a figurative dismantlement of prosopopoeia; by severing Heresy's body limb from limb, the virtues effectively reversed the poetic process of "person-making."¹⁰⁹ The brutality and self-reflexivity of Prudentius's verbal image was brilliantly captured in a ninth-century manuscript illumination now in Brussels, which portrayed Heresy's mutilation in two stages (Figure 4.23).¹¹⁰ The center register shows Faith's initial attack as the virtue stops Heresy's antagonistic speech by driving a lancet into her mouth. In the lower register, the infiltrator's body is chopped into pieces by swords and eaten by wild creatures. As Prudentius had done in his poem, the artist placed particular emphasis on neutralizing Heresy's ability to propagate her personified meaning verbally and visually. In the first scene, the virtue's punishment is meted out against the vice's mouth, thus canceling her means of verbal communication; the second retribution, meanwhile, targets Heresy's personified body, which in semiotic terms is the visual counterpart to her speech.

At Santi Quattro Coronati, personifications and historical characters interact verbally and physically within unified pictorial settings. In narrative theory, such free interaction between allegories and humans is described as "metalepsis," which denotes a transgression of boundaries between logically distinct worlds.¹¹¹ The north bay frescoes make widespread use of boundary-crossing to unite the literal level of history with its allegorical and moral significance.¹¹² Throughout the cycle, human and allegorical figures interrelate to present a series of perceived moral truths that exist beyond the particulars of history. Yet, these moral truths are at the same time notionally anchored in historically specific citations and characters. The cycle's complex negotiation between history and allegory can be placed in conversation with two further images from the psychomachian tradition. Examples from the illuminated Bamberg Apocalypse, produced at Reichenau around the turn of the eleventh century, and a twelfth-century manuscript made at the monastery of Saint



4.23. Mutilation of Heresy as seen in ninth-century copy of Prudentius's *Psychomachia*. Brussels, Bibliothèque Royale ms 9987–91, fol. 124r. Photograph: KBR Brussels.

George in Prüfening evoke a sustained artistic engagement with the perceived semantic interrelations between biblical characters and personified virtues. These examples, as we will see, probe the inherent problem of the signifying accuracy of personifications and explore narrative framing as a tool for highlighting the subtextual presence of abstract virtuous qualities within biblical narratives.

A double-spread illumination from the Bamberg Apocalypse shows the coronation of the manuscript's presumed patron, Emperor Otto III, accompanied by a selection of triumphant personifications on the facing page (Figure 4.24).¹¹³ The latter composition shows four lancet-wielding virtues



4.24. Virtues trampling vices from Bamberg Apocalypse; top register likely shows, from left to right, *Timor Domini* (Fear of God) trampling *Inanis Gloria* (Vainglory), Abraham, *Pudicitia* (Chastity) trampling *Libido* (Lust), Moses; bottom register likely shows, from left to right, *Patientia* (Patience) trampling *Ira* (Wrath), King David, *Poenitentia* (Penitence) trampling *Obstantia* (Obstinacy), Job. Bamberg Staatliche Bibliothek, Cod. A. II. 42, fol. 59v–60r. Photograph: Staatsbibliothek Bamberg, Creative Commons License, CC BY-SA 4.0.

trampling their unclothed counterparts. Apart from their differently colored mantles, the four virtues are formally indistinguishable. The inscription that runs across the upper and central borders states that virtuous conduct is the fulfillment of God's commands but does not identify any of the pictured individuals.¹¹⁴ The identities of the four virtues can be established only through iconographic decipherment of the four Old Testament personages standing beside them. The two figures in the lower register can be plausibly identified as Job and David, based on the former's shabby appearance and the latter's regalia. The most likely candidates for the upper register are Moses for the person holding a book and Abraham for the white-haired man without further attributes. These four Old Testament figures were occasionally associated with specific virtues. For example, in Isidore's *De ortu et obitu patrum*, a biographical index of biblical characters, Abraham is associated with *Timor Domini* (Fear of God), Moses with *Pudicitia* (Chastity), Job with *Patientia* (Patience), and David with *Poenitentia* (Penitence).¹¹⁵ If we accept Isidore's text as a reference point, we might deduce that the trampled vices must be those traditionally paired with the aforementioned virtues: *Inanis Gloria* (Vainglory), *Libido* (Lust), *Ira* (Wrath), and *Obstinantia* (Obstinacy). The illumination, in other words, required its viewers to become iconographers. In the scenario just outlined, the four Old Testament characters operate as interpretive keys for a more informed understanding of personifications that would otherwise remain nameless moral qualities housed in nearly indistinguishable bodies. In the absence of written labels or other distinguishing attributes, viewers were required to apply deductive reasoning and draw upon previously acquired knowledge. Such sustained interpretive involvement could give rise to the contemplation of weightier questions about the inherent ambiguity of personification allegory and the seeming interdependency of allegory and history.

The twelfth-century monastic manuscript from Prüfening approached the relation of allegory to history from a variety of different angles (Figure 4.25).¹¹⁶ Two facing full-page illuminations feature six square panels each, organized as matching grids to form a storiated psychomachian diptych. The twelve panels show selected episodes from the Old Testament, most of which feature personifications of vices and virtues included as interpretive keys to the moral significance of each narrative scene. Thus, the left folio (3v) displays six biblical stories associated with vices, while the right folio (4r) displays six associated with virtuous moral concepts. On the bottom registers, *Inanis Gloria* (Vainglory) is paired with the suicide of Saul (folio 3v, bottom left) and opposed to *Humilitas* (Humility), who is paired with David's anointment (folio 4r, bottom right). Similarly, *Voluptas* (Desire) is paired with the death of Ahab (folio 3v, bottom right) and contrasted with *Sobrietas* (Sobriety), whose accompanying narrative depicts the ascension of Elijah (folio 4v, bottom left). The latter two scenes visually mirror one another by means of the flying chariots of



4.25. Two facing full-page illuminations feature six square panels each, organized as matching grids to form a storiated psychomachian diptych. The twelve panels show selected episodes from the Old Testament, most of which feature personifications of vices and virtues included as interpretive keys to the moral significance of each narrative scene. The left folio (3v) displays six biblical stories associated with vices while the right folio (4r) displays six associated with virtuous moral concepts. Munich, Bayerische Staatsbibliothek Clm 13002, fol. 3v–4r. Photograph: Bayerische Staatsbibliothek München / Creative Commons Non-Commercial Share-Alike 4.0 International.



4.25. (cont.)

Elijah and Ahab. The scenes in the central register follow a similar compositional logic: On folio 3v, center left, the story of Haman's hanging is accompanied by the vice *Honoris Appetentia* (Appetite for Honor); this image is contrasted with that on folio 4r, center right, showing the virtue

Longanimitas (Long-Suffering Patience) paired with the story of Mordechai's honoring.¹¹⁷ In the other two scenes, *Potentia* (Violence) is paired with the downfall of Pharaoh (folio 4r, center left), while *Mansuetudo* (Patience/Meekness) is coupled with Moses receiving the commandments (folio 3v, center right).¹¹⁸ The mirrored distribution of these scenes in grids of corresponding size and layout means that the manual operation of closing the codex would enact a physical confrontation between the virtuous characters on the right and the vicious ones on the left.

Each of the six scenes in the lower two registers shows the personified virtue or vice standing to the far right as a seemingly external character in relation to the represented biblical events. The relationship between biblical history and personification allegory in the images can accordingly be interpreted in two ways. One might understand the virtues and vices to be "narrators" who recount the adjacently depicted stories as examples of how a given abstract moral quality is enacted in history. An alternative reading would interpret the allegorical figures as a secondary level of signification. Under this lens, the images' compositional structure, as framed scenes organized in grids according to pictorial narrative convention, advances biblical history as the primary register of signification. The personifications would accordingly be interpreted as "embedded" in the narratives as didactic tools that guide viewers' interpretations. In either interpretative scenario, however, the placement of allegories at the far right of each scene and thus slightly removed from the narrative action emphasizes the figures' elucidatory function in relation to the biblical events. Like the Bamberg illuminations, the lower two registers in the Prüfening drawings underscore the interdependency of allegory and history. Yet, whereas the Bamberg virtues relied on biblical characters for decipherment, the Prüfening images called on labeled personifications to elicit moral interpretations from the narratives represented.

Two scenes in the top registers of the Prüfening folios appear to reverse the diegetic structure seen in the lower registers. At the top left of folio 3v, the evangelist John, portrayed as the author of the Book of Revelation, stands to the far left in the position otherwise occupied by allegorical figures. John is paired with the enthroned figure of *Cupiditas* (Greed), who in turn is accompanied by the Daughter of Babylon; the latter two figures appear within the city of Babylon represented symbolically as an arched gateway. This scene is contrasted with the image at the top right of folio 4r, which shows the Daughter of Sion together with the enthroned *Caritas* (Charity); the pair occupy a symbolic representation of Jerusalem rendered as an arched structure with four small towers, out of which protrude the heads of the four cardinal virtues *Prudentia* (Prudence), *Iustitia* (Justice), *Fortitudo* (Fortitude), and *Temperantia* (Temperance). To the far right stands David, represented as author of his Psalms, in a position equivalent to that of John on folio 3v. Both images

display a visual relationship between allegory and biblical history that is significantly more complex than that found in the scenes in the central and bottom registers. John and David stand to the sides as scriptural authors whose narrations give rise to the symbolic compositions of Jerusalem and Babylon.¹¹⁹ The apocalyptic Babylon and the heavenly Jerusalem, as evoked in John's Book of Revelation and David's Psalms, maintain a dual scriptural status as both actual and symbolic sites. Furthermore, as they appear in the images, the daughters of Jerusalem and Babylon both personify and occupy their respective queendoms, while the enthroned figures of *Caritas* and *Cupiditas* are rendered as the allegorical sovereigns of these symbolic, yet actual, territories.

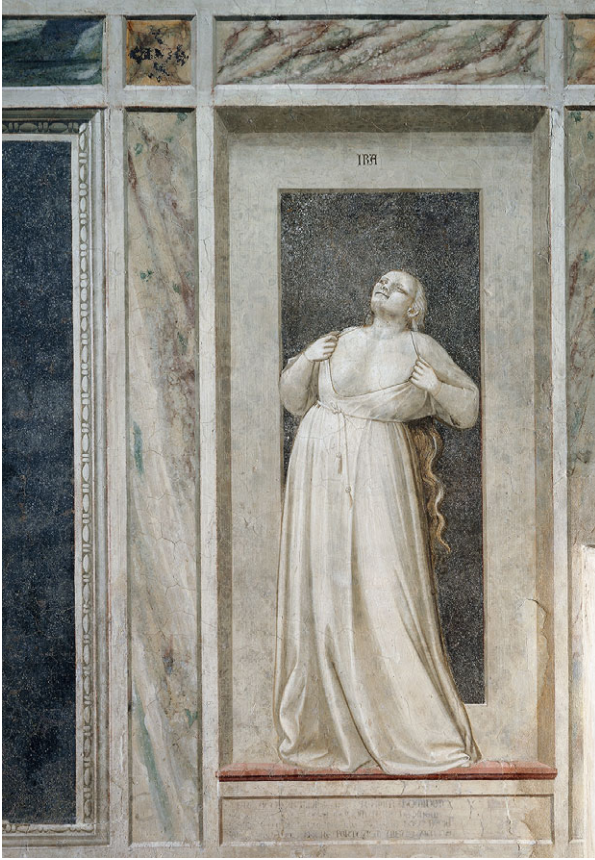
Further levels of complexity can be identified in two scenes that show virtues and vices as elucidative actants in the biblical stories. In the scene of David's anointment, on the bottom right of folio 4r, *Humilitas* places a crown on the young protagonist's head. Here, *Humilitas* serves to associate David with the quality of humility, yet is also an active participant in the story; her crowning gesture visually echoes that performed by the attendant Samuel, who pours oil onto the anointed king. A similarly transgressive characteristic is seen in the image at the top right of folio 3v, where the ancient king of Lydia, Croesus, stands with arms tied behind his back in the company of *Opulentia* (Opulence); on a throne to the left sits the Persian King Cyrus attended by a sword-wielding knight. Although Cyrus is favorably viewed in the Old Testament for liberating the Jews from their Babylonian captivity, the scene's moral message emphasizes the extra-biblical story of Croesus's downfall at the hands of *Fortuna* (Fortune), represented at the far right as a blind, two-headed woman.¹²⁰ Like *Humilitas* in the scene of David's anointment, the vice *Opulentia* joins Croesus in captivity as an active participant in the story. Finally, the non-scriptural status of the Croesus story and the appearance of two personified characters further complicate the scene's treatment of history and allegory, especially when viewed in relation to the compositional logic followed by the majority of images in the two-page spread.

Taken as a whole, the Prüfening drawings engaged viewers in studious, and at times playful, thought about the categorical distinction between history and allegory. The images in the center and bottom registers establish an apparently consistent diegetic structure by quarantining the two levels of meaning in a manner comparable to that pertaining in Prudentius's *Psychomachia*. Yet, by establishing this seemingly consistent compositional logic, the center and bottom images empower those in the top registers to playfully disrupt the logic by means of their reversed narrative structure and transgressive intermingling of personifications and biblical characters. As such, the Prüfening artist appears to have recognized, as Prudentius had done centuries before, that *metalepsis*, or playful yet meaningful boundary-crossing, can be achieved only after the creation of a coherent system of narrative boundaries.



4.26. Giotto's fresco of Christ before Caiaphas, ca. 1305, Arena Chapel, Padua. Photograph: Steven Zucker, Smarthistory / Creative Commons Share-Alike License.

The Prüfening artist anticipated in some ways Giotto's treatment of virtues and vices in the Arena Chapel frescoes, completed around 1305. In the Paduan chapel, the late medieval painter distributed the allegories at eye level along the north and south wall dados. Each figure is enclosed in a niche and represented in a near-monochromatic gray to differentiate personified virtues and vices from the vividly colored New Testament narratives on the walls above. As in the majority of the Prüfening scenes, Giotto's virtues and vices functioned as elucidatory cues that guided viewers' interpretations of the chapel's biblical stories. In the Arena Chapel, as Bruce Cole recognized, this didactic function relied on the repetition of distinct gestures and poses that enabled viewers to connect particular allegorical figures to characters or themes represented in the narrative scenes.¹²¹ The most explicit example is the visual parallel between *Ira* (Wrath) and the biblical character of Caiaphas (Figures 4.26 and 4.27). On the north wall, *Ira* expresses her primary attribute, rage, by rending her tunic to reveal her bare chest. This gesture of anger was visually repeated on the south



4.27. Giotto's fresco of *Ira* (Wrath), ca. 1305, Arena Chapel, Padua. Photograph: © A. Dagli Orti / © NPL – DeA Picture Library / Bridgeman Images.

wall fresco of Caiaphas, who ruptures his tunic as he accuses Christ of blasphemy. Other gestural references include the figure of Mary in *The Way to Cavalry*, whose determined stance calls to mind the figure of Fortitude; and the clear postural resemblance between the enthroned Christ in the *Last Judgment* and the personification of Justice.¹²² Through such visual echoes, the virtues and vices could potentially bridge the two levels of signification at work in Prudentius's poem. Giotto's personifications appeared once as straight allegories, painted *en grisaille* to underscore their ontological difference; the allegorical concepts then made a second, veiled appearance in the guise of specific historical characters within the narrative action.¹²³ In this way, as Andrew Ladis notes, the virtues and vices could serve as rhetorical indicators to nudge viewers toward a moral judgment of specific figures and actions in the narrative.¹²⁴

The rhetorical strategies employed by the Arena Chapel frescoes and the Prüfening and Bamberg manuscripts addressed the same tension between allegory and history that Prudentius had sought to circumvent by embedding

narratives in the *Psychomachia*. The problem with allegory, as Augustine had foreseen, was its dubious link to experienced reality. Vicious and virtuous qualities were never subject to direct experience in their pure forms; they were always mediated in complex ways through human actions. Moreover, medieval poetic and pictorial traditions had outfitted the virtues and vices with few individuating traits when compared to, say, the liberal arts or the martyrs. The Santi Quattro Coronati frescoes attempted to work around these problems by equipping the virtues and vices with an assortment of interpretive keys. The cycle's labels, historical characters, and inscribed scrolls lent context and specificity to personifications whose postures, facial features, and psychological expressions were relatively uniform. These contextualizing elements were attempts to secure the links between personifications and their referents. Yet, the widespread use of labeling also focused attention on the underlying problem of reference that made labels necessary in the first place. Understood in this perspective, the cycle's varied forms of labeling implied that personifications of virtues and vices were somehow unreliable conveyors of meaning.

Such newfound awareness of the equivocality of personification allegories might be viewed as an aspect of broader cultural developments. The thirteenth century was allegedly a period of changing attitudes toward allegorical language and imagery. In *Seeing through the Veil*, Suzanne Conklin Akbari argues that, unlike earlier medieval writers, thirteenth-century poets no longer took for granted that personifications corresponded to their referents.¹²⁵ Twelfth-century poets had worked under the assumption that personified figures provided readers with unmediated access to the abstract concepts they embodied.¹²⁶ Alan of Lille's personified *Natura*, for example, was verbally fashioned to mirror the divinely created cosmos in every detail. By contrast, the figure of *Natura* created by Jean de Meun in his continuation of the *Roman de la Rose* appeared as a "richly fictional character which only secondarily signifie[d] the qualities traditionally associated with that personification."¹²⁷ This new approach to allegory, Akbari argues, reflected increasing skepticism about the mediating capacity of language, rooted in moderately "nominalist" ideas about the unreliable links between words and things.¹²⁸ Medieval philosophies of language had long grappled with the question of whether words were human constructs whose connections to things were accidental, or if there was some necessary relationship between a name and the thing named.¹²⁹ The attention paid to the problem by thirteenth-century philosophers and poets suggests a renewed concern about mediation more generally. Put differently, such debates reframed Paul's pronouncement that "now we see only puzzling reflections in a mirror" as a linguistic problem. Allegory only exacerbated the issue. If language was already a potential impediment to knowledge, then allegory, with its penchant for expressing something other than what is meant, placed an additional veil between humans and the world.

The varied labeling strategies employed in Cardinal Conti's virtues cycle express a desire to ensure accuracy of interpretation. Inscriptions, scrolls, and historical *exempla* functioned not only as identifiers for the cycle's personifications but also as interpretive lenses that guided viewers toward specific readings of the moral concepts being represented. As we saw in [Chapter 3](#), the rich application of contextualizing information in the psychomachian cycle stood in stark contrast to the unidentified antiquities in the north bay lunettes. These divergent approaches to contextualization created a meaningful tension around the central problem of pictorial reference. The lunette figures were intentionally decontextualized to invite reflective looking, whereas the labeling devices in the virtues cycle sought to delimit open-ended speculation. The paintings in both registers, however, appear to take for granted that painted figures are innately open to manifold interpretations, and that the activation of such interpretations depends on the cognitive engagement of beholders.

Taken as a whole, the virtues cycle in the north bay invokes the all-seeing vantage of divine omniscience by depicting an exegetical understanding of history. The cycle's deliberately anachronistic juxtapositions of heroes and villains from different historical periods simulates the elevated vantage of God who sees all of history in a single glance. This invocation of an external, atemporal vantage in the north bay contrasts with the emphasis on humanly experienced time in the south bay frescoes. The labors of the months depict the ways in which humans perceive the passage of time by observing changes in the natural environment and the particular labors in which farmers are engaged. Through its focus on manual labor, moreover, the agricultural calendar links this human understanding of time to the Genesis account of original sin, which was believed to have brought about the distinctly human condition of temporal existence.¹³⁰ Furthermore, the images of the seasons reinforce the connection between human life and temporality by portraying the four stages of the agricultural year as men of increasing age. Finally, the personified seasons link the calendar cycle to the celestial diagram on the ceiling, which references the scientifically grounded practice of telling time through astronomical observations. Considered as a whole, therefore, the south bay portrays time as seen from a vantage that is itself located within time. Time is, in other words, conceived as an enveloping "container" for humans to live within.¹³¹

In [Chapter 5](#) we will see how the frescoed crypt in Anagni Cathedral thematized other aspects of the human condition's fundamental temporality. Whereas Conti's frescoes at Santi Quattro Coronati focus attention on the ways in which human time might be empirically observed, placed under ecclesiastical control, and notionally overcome through the adaptation of an exegetical understanding of history, the Anagni frescoes interrogate the deteriorating effects of time on the human body and its associated political

implications. Indeed, much like the great hall at Santi Quattro Coronati, the program of frescoes in the Anagni crypt places multiple understandings of time in conversation with each other. The cosmological images near the crypt's entrance invoke the world's creation and the beginning of human time; the Old Testament vaults and the hagiographical narratives on the walls portray the sequential flow of human history with its underlying sacred significance; and the Revelation cycle in the central apse foretells the end of human time and its apocalyptic transformation into the notion of eternity. Against this backdrop, the crypt's collection of astro-medical motifs stimulated reflection on two particular aspects of human temporality: mortality and the unknowability of future events. As I argue in the [next chapter](#), these aspects are presented as the targets of medicine, which promised to extend human life by slowing bodily corruption, and astrology, which promised to extend the temporal reach of human understanding beyond the present tense *nunc*.

NOTES

- 1 Originally there were twelve compositions; two of these, on the west wall of the north bay, are lost.
- 2 For a detailed study of the inscriptions in the painted hall, see Noviello, "L'apparato epigrafico."
- 3 Adolf Katzenellenbogen, *Allegories of the Virtues and Vices in Medieval Art from Early Christian Times to the Thirteenth Century* (London: Warburg Institute, 1939); Joanne S. Norman, *Metamorphoses of an Allegory: The Iconography of the Psychomachia in Medieval Art* (New York: Peter Lang, 1988); Jérôme Baschet, "I peccati capitali e le loro punizioni nell'iconografia medievale," in *I sette vizi capitali: Storia dei peccati nel Medioevo*, eds. Carla Casagrande and Silvana Vecchio (Turin: Einaudi, 2000), 225–60.
- 4 The left-to-right sequence is the opposite of that of the calendar, which progresses right to left from January to December.
- 5 The vice's inscription reads IDOLATR[IA].
- 6 Aurelius Clemens Prudentius, *Psychomachia*, trans. H. J. Thomson, Loeb Classical Library 1 (Cambridge, MA: Harvard University Press, 1949). Indeed, the first five compositions of the painted cycle – the four on the west wall and the first on the north wall – appear to follow the sequence of Prudentius's late fourth-century poem. Their sequence is *Fides*, [lost composition], *Patentia*, *Humilitas*, and *Sobrietas*. We might accordingly hypothesize that the lost composition to the left of the central window on the western wall included *Pudicitia* (Chastity) and *Libido* (Lust).
- 7 The virtue's inscription reads PATIENTIA, that of Job reads J[O]B. The inscriptions for Pharaoh and *Ira* are lost; however, both figures can be identified by context. *Patentia*'s scroll reads "DECLINA A MALO (ET) FAC BONU(M)" (Turn away from evil and do good). *Ira* holds a scroll with a quotation from Exodus: "PERSEQUAR CONP(RE)HENDAM" (I will pursue, I will overtake).
- 8 The virtue's inscription reads VMILITAS, while that of David reads DAVIT RE[X]. *Humilitas*'s scroll features a scriptural citation from Luke 14:11: "QUI SE HUMILIA[T] EXALTABITUR" (He who humbles himself shall be exalted). The historical figure who originally accompanied *Superbia* is lost.
- 9 The figure has been truncated at the waist due to the insertion of a large window in the seventeenth century. Judging by Solomon's proportions, he probably stood on top of a vanquished figure.

- 10 The virtue's inscription reads SOBRIETAS, while that of Daniel reads [D]ANIEL. *Sobrietas'* scroll reads "VICTV[M] ET VESTITVM" (Food and clothes). This is a highly abbreviated reference to Deuteronomy 10:18: "He loves the stranger and gives him food and clothes." More generally, the phrase *victum et vestitum* refers in medieval texts to the practice of distributing alms to the poor.
- 11 The vice's inscription reads LVXVRIA. Her scroll features a reference to Isaiah 22:13: "COMMEDAMVS ET BIBAMVS" (Let us eat and drink). The verse condemns Jerusalem's decadence and is sometimes associated with the fall of Jerusalem to the Babylonians in 587 BCE. The pairing of Muhammad and Daniel speaks to the identification of the prophet of Islam with the Antichrist and of the Islamic empire with the ancient kingdom of Babylon. Such polemic comparisons were commonplace from the ninth century onward. Notable articulations of these ideas include Paul Alvarus's polemic treatise against Islam, *Indiculos luminosus*, and Pope Innocent III's 1213 circular announcing the Fifth Crusade, in which the Conti pontiff described Muhammad as the "Son of Perdition" who seduced people "through worldly enticements and carnal delights." John Tolan, *Saracens: Islam in the Medieval European Imagination* (New York: Columbia University Press, 2002), 194; Kenneth B. Wolf, "Muhammad as Antichrist in Ninth-Century Córdoba," in *Christians, Muslims, and Jews in Medieval and Early Modern Spain: Interaction and Cultural Change*, eds. Mark Meyerson and Eric English (Notre Dame, IN: University of Notre Dame Press, 1999), 3–19; Almond, *The Antichrist*, 130.
- 12 The virtue's inscription reads CONCORDIA, while that of Paul reads PAVL(VS). *Concordia* exhibits a scroll inscribed "CV(M) OMNIBVS PACE(M) HABEA(N)T" (Live in peace with everyone), which is an abbreviated quotation from Paul's letter to the Romans (12:18).
- 13 The vice's inscription reads DISCORDIA. The identification of Arius is suggested by the remaining letter "A" of his identifying inscription. As the representative of Arianism, one of the most important Christian heresies of Late Antiquity, Arius would be a suitable historical example of discord. Another possibility, given the overall apocalyptic theme of the virtues cycle, would be Antiochus IV Epiphanes. Antiochus, the infamous second-century BCE persecutor of Jews, was cited as a precursor to the Antichrist by the Old Testament prophet Daniel, and later by the thirteenth-century apocalyptic writer Joachim of Fiore.
- 14 The virtue's inscription reads LARGITAS, while that of Lawrence reads LA[V]RENTI (VS). The scroll of *Largitas* cites Paul's second letter to the Corinthians (9:6): "QVI PARCE SEMINAT PARCE ST METE[T]" (Whoever sows sparingly will reap sparingly). The ST [sic] was in all likelihood meant as ET.
- 15 The vice's inscription reads [A]VARIT[I]A, while that of Judas reads IVDAS.
- 16 The scroll reads "NE SIT TE DITIOR ALTER" (Lest another be richer than you). Horace, *Satires*, Book I, 1.40. Again, given the overall apocalyptic theme of the cycle, it is worth noting that Gregory the Great cast Judas as an Antichrist figure in his *Moralia in Job*.
- 17 The virtue's inscription reads VERA RELIGIO. The vice's inscription reads YPOCRISIS, while that of the Pharisee reads FAR[IS]EVS. *Vera Religio's* scroll includes a reference to James 1:27: "RELIGIO MVNDA (ET) INMA (CVLATA)" (Pure and immaculate religion). The verse held up by *Ypocrisis* refers to Luke 18:12: "IEIUNO BIS IN SABATO DECIMA" (I fast twice a week [and give] a tenth [of all I get]).
- 18 The partially lost inscription [. . .]TIN(VS) could also be reconstructed as Martinus, as in Martin of Tours, another bishop saint. However, Augustine remains the more likely candidate. Not only did he author *De vera religione* (On True Religion), he also made an explicit connection between the term "*vera religio*" and the virtues: "there cannot be true virtuous actions where there is not true religion" (*non possint ibi verae esse virtutes, ubi non est vera religio*). See *De Civitate Dei*, I, xix, c. 25.
- 19 The four figures are identified by inscriptions as follows: KARITAS, PETR(VS), [O]DIVM, NERO. *Karitas's* scroll reads "LEGEM QVAM VIVES SI FRAT(R)E(M) DILIGIS INPLES" (If you love your brother, you fulfill the law by which you live),

- which appears to paraphrase several biblical verses, including 1 Romans 13:8, 1 John 4:21, and 1 John 2:10. The scroll held by Nero reads “QVALITER HU(N)C Q(VI)S AMAT (S) IB(I) Q(VI) C(ON)TRARIUS EXTAT” (How, then, could he love the one who appears contrary to himself?), which is a direct citation from the Proverbs of Wippo. The *Proverbia Wipponis* were dedicated to the Holy Roman Emperor, Henry III (r. 1046–56). Peter and Nero are linked through the story of Peter’s martyrdom. The emperor was one of the most commonly cited types for the Antichrist in medieval apocalyptic writings. For the reception of Nero in the medieval period, see Harry O. Maier, “Nero in Jewish and Christian Tradition from the First Century to the Reformation,” in *A Companion to the Neronian Age*, eds. Martin T. Dinter and Emma Buckle (Chichester: Wiley-Blackwell, 2013), 385–404, with annotated bibliography. Nero and Peter are also paired together in the sculptural program of the portico of the cathedral of Sessa Aurunca. See Glass, *The Archivolt Sculpture*, 127–8.
- 20 The virtue’s inscription reads TIMOR D(OMN)NI, while that of Jerome reads IERONIM(VS). The inscription on the scroll held by *Timor Domini* is illegibly fragmented.
- 21 The vice’s inscription reads INANIS GL(ORI)A, while that of Alexander reads ALEXANDER. The scroll held by *Inanis Gloria* reads “TE BONAFACITORV(M) MANIFESTA FAMA TVORV(M)” (Your fame is manifest in your good deeds). Alexander was frequently cited in medieval texts as an example of arrogance and vainglory, often with reference to his fabled attempt to travel to the heavens in a chariot drawn by griffins. See Schmidt, *A Legend and Its Image*.
- 22 The virtue’s inscription reads AMOR CELESTIS; that of Francis reads FRANCISC(VS). The inscription on the scroll of *Amor Celestis*, “SI CARCER TALIS DE(VS) O TVA MA (N)TIO QVALIS” (If this is the prison, what will be your home, O God), is drawn from the Proverbs of Wippo. The figure of the corresponding vice is now lost. However, if the composition was based on the pairing of virtuous and vicious qualities in Wippo’s Proverbs, the missing figure should be identified as *Amor Presentis Saeculi*. For Wippo’s Proverbs, see Migne, ed., *Patrologiae Cursus Completus*, vol. 142, col. 1263. In Byzantine and Coptic tradition from the ninth century onward, Julian the Apostate is depicted fallen on the ground, defeated by Saint Mercurius Caesarea, for example in BAV, Copt. 66, fol. 287v.
- 23 The virtue’s inscription reads EMVLATIO S(AN)C(T)A; that of Dominic reads DOMINIC(VS). The vice’s inscription reads EMVLATIO PERVERSA; that of Simon reads SIMON MAG(VS). The vice holds a scroll with an abbreviated citation from Galatians 1:17: “EMVLANTVR VOS NON BENE” (They make much of you, but for no good purpose). The response from the personified virtue is drawn from Paul’s second letter to the Corinthians (11:2): “EMVLOR VOS DEI EMVLATIONE” (I am jealous for you with a godly jealousy). On the identification of Simon Magus with the Antichrist, see Almond, *The Antichrist*, 100–4. For perceptions of Simon Magus in medieval writings more broadly, see Alberto Ferreiro, *Simon Magus in Patristic, Medieval and Early Modern Traditions* (Leiden: Brill, 2005).
- 24 The motif was traced to early Christian fresco decorations and lamps in Egypt by Earl Baldwin Smith, *Early Christian Iconography and a School of Ivory Carvers in Provence* (Princeton, NJ: Princeton University Press, 1918), 146–58. The pre-Christian origins and development of the motif of trampling as an image of triumph were explored in Bernhard Schweitzer, “Dea Nemesis Regina,” *Jahrbuch des Deutschen Archäologischen Instituts* 46 (1931): 175–246.
- 25 The image of Christ trampling the beasts appears in the so-called Genoels-Elderen ivories and in a twelfth-century ivory diptych in Florence. Herbert Kessler places these scenes in dialogue with early manuscript illuminations of Prudentius’s *Psychomachia*. See Herbert Kessler, “Evil Eye(ing): Romanesque Art as a Shield of Faith,” in *Romanesque Art and Thought in the Twelfth Century: Essays in Honor of Walter Cahn*, ed. Colum Hourihane (Princeton, NJ: Index of Christian Art, Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2008), 107–35.

- 26 Dale, *Relics, Prayer, and Politics in Medieval Venetia*, 25–7, 68–70; Jill Bain, “Signifying Absence: Experiencing Monochrome Imagery in Medieval Painting,” in *A Wider Trecento: Studies in 13th and 14th Century European Art Presented to Julian Gardner*, eds. Louise Bourdua and Robert Gibbs (Leiden: Brill, 2012), 5–20.
- 27 Danielle Gaborit-Chopin, *Avori medievali* (Florence: Museo Nazionale del Bargello, 1988), 34–5; Norman, *Metamorphoses of an Allegory*, 105–11.
- 28 This well-known set of drawings, from BAV, MS Barb. lat. 2738, fols. 104r–105v, was first published by Gerhart B. Ladner, “I mosaici e gli affreschi ecclesiastico-politici nell’antico Palazzo Lateranense,” *Rivista di Archeologia Cristiana* 12 (1935): 265–92. See also Christopher Walter, “Papal Political Imagery in the Medieval Lateran Palace,” *Cahiers Archéologiques Fin de l’Antiquité et Moyen Age* 20 (1970): 155–76; Ingo Herklotz, “Die Beratungsräume Calixtus’ II. im Lateranpalast und ihre Fresken: Kunst und Propaganda am Ende des Investiturstreits,” *Zeitschrift für Kunstgeschichte* 52:2 (1989): 145–214; Stroll, *Symbols as Power*, 16–35.
- 29 The term “antipope” refers to popes who were appointed by and loyal to the emperor.
- 30 To the right of the enthroned pope is the figure of Emperor Henry V. The two rulers hold between them a large parchment scroll displaying the text of the Concordat of Worms, which in the context of the mural is presented as a legitimating document of power that underscores the papacy’s claims, as expressed in the images of papal triumph by trampling. The concordat between Pope Calixtus II and Henry V, which settled the first phase of the Investiture Controversy, took place on September 23, 1122. The murals in the Lateran Palace were probably painted between this date and the death of Calixtus II on December 13, 1124.
- 31 For a rich discussion of the iconographic theme, see Maria Laura Marchiori, “Art and Reform in Tenth-Century Rome: The Paintings of S. Maria in Pallara” (PhD diss., Queens University, 2007), 77–152.
- 32 This large-scale pictorial program at Chartres consists of five slender lancets set below a large rosette with an image of Christ surrounded by the twenty-four elders of Revelation 4:4, 10–11. Flanking the Virgin and Christ child in the central lancet are Luke seated on the shoulders of Jeremiah, Matthew astride Isaiah, John on Ezekiel, and Mark on Daniel’s shoulders. For a discussion of the windows, see Françoise Perrot, “Le vitrail, la croisade, et la Champagne: réflexion sur les fenêtres hautes du choeur à la cathédrale de Chartres,” in *Les Champenois et la Croisade: actes des quatrième journées rémoises, 27–28 novembre 1987*, eds. Yvonne Bellenger and Danielle Quérueil (Paris: Aux Amateurs de Livres, 1989), 109–30; Beat Brenk, “Bildprogrammatik und Geschichtsverständnis der Kapetinger im Querhaus der Kathedrale von Chartres,” *Arte Medievale* 2:5 (1991): 71–96.
- 33 The iconographic program is completed by twelve unidentified busts set into the spandrels above the arcades, which might be intended as personifications of the winds, and, finally, by an image of the font’s presumed donor, a man dressed as a monk kneeling at the feet of the figure of Jeremiah. Rainer Budde, *Deutsche romanische Skulptur, 1050–1250* (Munich: Hirmer, 1979), 54–5.
- 34 The portal also extends its typological program to personifications of *Ecclesia* and *Synagoga* placed on either side of the doorway’s sequential embrasures. Nina Rowe, “Synagoga Tumbles, a Rider Triumphs: Clerical Viewers and the Fürstenportal of Bamberg Cathedral,” *Gesta* 45:1 (2006): 15–42; Nina Rowe, *The Jew, the Cathedral and the Medieval City: Synagoga and Ecclesia in the Thirteenth Century* (Cambridge: Cambridge University Press, 2011).
- 35 The prophets-apostles on the portal are replicas of the original sculptures, which are now displayed in Bamberg’s Diocesan Museum next to the cathedral.
- 36 Eclissi’s documentation is preserved in BAV, MS Vat. lat. 9071, fols. 234v–235r. For an analysis of the paintings and discussion of their date, see Marchiori, “Art and Reform in Tenth-Century Rome,” 13–76; Laura Marchiori, “Medieval Wall Painting in the Church of Santa Maria in Pallara, Rome: The Use of Objective Dating Criteria,” *Papers of the British School at Rome* 77 (2009): 225–55.

- 37 Friedrich Ohly, "Typology as a Form of Historical Thought," in *Sensus Spiritualis: Studies in Medieval Significance and the Philology of Culture*, trans. Kenneth J. Northcott (Chicago: University of Chicago Press, 2005), 31–67, at 32. A good analysis of the development of typology is David Dawson, *Christian Figural Reading and the Fashioning of Identity* (Berkeley: University of California Press, 2001). For typology more generally, see Northrop Frye, *The Great Code: The Bible and Literature* (New York: Harcourt Brace Jovanovich, 1982), esp. 74–138; James L. Kugel and Rowan A. Greer, *Early Biblical Interpretation* (Philadelphia: Westminster Press, 1986); James J. Paxson, "A Theory of Biblical Typology in the Middle Ages," *Exemplaria* 3:2 (1991): 93–117; Frances M. Young, *Biblical Exegesis and the Formation of Christian Culture* (Cambridge and New York: Cambridge University Press, 1997); John J. O'Keefe and Russel R. Reno, *Sanctified Vision: An Introduction to Early Christian Interpretation of the Bible* (Baltimore: Johns Hopkins University Press, 2005); Tibor Fabiny, *Figura and Fulfillment: Typology in the Bible, Art and Literature* (Eugene, OR: Wipf and Stock, 2016).
- 38 In the original German version of his essay, Ohly describes typology as a *Denkform*. Friedrich Ohly, "Typologie als Denkform der Geschichtsbetrachtung," in *Natur, Religion, Sprache, Universität: Universitätsvorträge 1982/83. Schriftenreihe der westfälischen Wilhelms-Universität Münster* 7, ed. Heinz Dollinger (Münster: Aschendorff, 1983), 68–102.
- 39 A scriptural model for such counter-typological pairings could be the juxtaposition of Christ's crucifixion with the suicide of Judas. Paxson, "A Theory of Biblical Typology," 371.
- 40 David Abulafia, *Frederick II: A Medieval Emperor* (London: Allen Lane, 1988), 430–1.
- 41 The inscription on the scroll held by Nero offers an implicit commentary on the cycle's distinctive pictorial structure of oppositional and complementary relationships between figures. The citation, which is culled from one of Wippo's proverbs, says, "QVALITER HV[N]C Q[VI]S AMAT [SI]B[I] Q[VI] C[ON]TRARIVS EXTAT" (How can one love someone who is opposite of oneself). The scroll held up by *Karitas* reads "LEGEM QVAM VIVES SI FRAT[R]E[M] DILIGIS INPLES" (If you love your brother, you fulfill the law).
- 42 Francis and Dominic may have been acquaintances of Stefano Conti; both future saints were reportedly close to Pope Gregory IX, who was Stefano's cousin. Ovidio Capitani, "Gregorio IX," in *Enciclopedia dei papi* (Rome: Istituto della Enciclopedia Italiana, 2000), 2:363–80.
- 43 Paradoxically, therefore, Julian rejected the new world order of his own present era.
- 44 On the image of Francis, see Lorenzo Cappelletti, "L'immagine di San Francesco nell'Aula gotica dei SS. Quattro Coronati a Roma," *Frate Francesco* NS 87 (2021): 327–66. The image of Francis at Santi Quattro Coronati appears related to a depiction of the saint in the Gregory Chapel of the monastery of Sacro Speco in Subiaco. Some scholars consider the Subiaco mural the earliest preserved portrayal of Francis, and attribute the fresco to some of the same painters who later worked on the Anagni crypt and at Santi Quattro Coronati. Klaus Krüger, however, argues that the image in question was originally that of a Benedictine monk and was only later repainted to resemble Francis. For these arguments, see Alessandro Bianchi, "Una proposta per l'inquadramento storico degli affreschi della cappella di S. Gregorio al Sacro Speco di Subiaco," in *Federico II e l'arte del Duecento italiano: atti della III Settimana di studi su storia dell'arte medievale dell'Università di Roma, 15–20 maggio 1978*, ed. Angiola Maria Romanini (Galatina: Congedo, 1980), 2:5–14; Klaus Krüger, *Der frühe Bildkult des Franziskus in Italien: Gestalt- und Funktionswandel des Tafelbildes im 13. und 14. Jahrhundert* (Berlin: Mann, 1992), 56–63. A panel of about 1250 in the Fogg Art Museum, Harvard University, is sometimes referred to as the earliest preserved image of Dominic. See Carmen Gomez-Moreno et al., "A Sienese St. Dominic Modernized Twice in the Thirteenth Century," *Art Bulletin* 51:4 (1969): 363–6.
- 45 Società Internazionale di Studi Francescani, *Il papato duecentesco e gli ordini mendicanti: atti del XXV Convegno internazionale, Assisi, 13–14 febbraio 1998* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1998).

- 46 On the question of chronological versus non-chronological thinking in the medieval period, see Siegfried Kracauer, "Time and History," *History and Theory* 6:6 (1966): 65–78; Hans-Werner Goetz, "Der Umgang mit der Geschichte in der lateinischen Weltchronistik des hohen Mittelalters," in *Julius Africanus und die christliche Weltchronik*, ed. Martin Wallraff (Berlin and New York: Walter de Gruyter, 2006), 179–205; Zachary Sayre Schiffman, *The Birth of the Past* (Baltimore: Johns Hopkins University Press, 2011), 77–137.
- 47 For example, in the Old Testament's Book of Kings, Solomon is praised for his fabulous wealth and wisdom, which "surpassed the wisdom of all the people of the east, and all the wisdom of Egypt" (1 Kings 10:27). See also "Solomon," in *Dictionary of Biblical Imagery*, eds. Ryken et al., 804–5; Mishtooni Bose, "From Exegesis to Appropriation: The Medieval Solomon," *Medium Aevum*, 65:2 (1996): 187–210.
- 48 On this theme, see Jean-Patrice Boudet, "Le modèle du roi sage aux XIII^e et XIV^e siècles," *Revue Historique* 647 (2008): 545–66; Samantha Kelly, *The New Solomon: Robert of Naples (1309–1343) and Fourteenth-Century Kingship* (Leiden: Brill, 2003); Laura Fábíán, "The Biblical King Solomon in Representations of Western European Medieval Royalty," in *The Routledge History of Monarchy*, eds. Elena Woodacre et al. (New York: Routledge, 2019), 54–69; Manuel Alejandro Rodríguez de la Peña, "The 'Wise King' *Topos* in Context: Royal Literacy and Political Theology in Medieval Western Europe (c. 1000–1200)," in *The Routledge History of Monarchy*, eds. Woodacre et al., 38–53.
- 49 Hampe, "Eine Schilderung des Sommeraufenthaltes der römischen Kurie," 530; Maccarone, "Innocenzo III teologo dell' Eucharistia," 380, n. 2.
- 50 Draghi, *Gli affreschi*, 18–22, 269–70.
- 51 *Ibid.*, 20; Agostino Paravicini Bagliani, "Il 'Registrum Causarum' di Ottaviano Ubaldini e l'amministrazione della giustizia alla curia romana nel secolo XIII," in *Römische Kurie. Kirchliche Finanzen. Vatikanisches Archiv. Studien zu Ehren von Hermann Hoberg*, ed. Erwin Gatz, 2 vols. (Rome: Università Gregoriana Editrice, 1979), 2:635–57.
- 52 1 Kings 10:24.
- 53 1 Kings 3:16–28.
- 54 The motif was included in the sculptural program of Chartres' north portals and in the stained-glass windows at Strasbourg Cathedral itself. See Claus M. Kaufmann, "The Iconography of the Judgment of Solomon in the Middle Ages," in *Tributes to Jonathan J. G. Alexander: The Making and Meaning of Illuminated Medieval and Renaissance Manuscripts, Art and Architecture*, eds. Susan L'Engle and Gerald B. Guest (London: Harvey Miller, 2006), 297–306.
- 55 Rowe, *The Jew, the Cathedral and the Medieval City*, 225–37.
- 56 *Ibid.*, 225–37.
- 57 Ernst H. Kantorowicz, *The King's Two Bodies: A Study in Mediaeval Political Ideology* (Princeton, NJ: Princeton University Press, 1997 [1957]), 87–192.
- 58 *Ibid.*, 98, n. 31.
- 59 Creswell Shearer, *The Renaissance of Architecture in Southern Italy: A Study of Frederick II of Hohenstaufen and the Capua Triumphator Archway and Towers* (Cambridge: Heffer, 1935); Carl A. Willemsen, *Kaiser Friedrichs II Triumph tor zu Capua: Ein Denkmal Hohenstaufischer Kunst in Suditalien* (Wiesbaden: Insel-Verlag, 1953); Christie K. Fengler and William A. Stephany, "The Capuan Gate and Pier della Vigna," *Dante Studies* 99 (1981): 145–57.
- 60 The thirteenth-century papacy placed a high value on legal knowledge. Innocent III was regarded by his generation as an astute scholar of ecclesiastical law; and legal reform appears to have been one of the main priorities of his reign, culminating in the Fourth Lateran Council of 1215. The program of legal systematization and codification was continued under Gregory IX, whose *Five Books on the Decretals*, along with a sixth volume added by Boniface VIII, would "form the basic code of canon law down to the nineteenth century." See Watt, "The Papacy," esp. 122–6.
- 61 Antonio García y García points out that Honorius's intervention at Bologna effectively made the institution "a dependency of the Holy See." See García y García, "The Faculties of Law," 388–408, at 388–9.

- 62 On the development of the papal tribunal in the thirteenth century, see Colin Morris, *The Papal Monarchy: The Western Church from 1050 to 1250* (Oxford: Oxford University Press, 1989), 568–77.
- 63 Jessica Berenbeim, *Art of Documentation: Documents and Visual Culture in Medieval England* (Toronto: Pontifical Institute of Mediaeval Studies, 2015).
- 64 Maria Laura Cristiani Testi, “Gli affreschi del Sacro Speco,” in *I Monasteri benedettini di Subiaco*, ed. Claudio Giumelli (Milan: Silvana, 2002), 95–132; Uwe Israel, “Der Papst und die Urkunde an der Wand: Innozenz III (1198–1216) in Subiaco,” *Quellen und Forschungen aus italienischen Archiven und Bibliotheken* 84 (2004): 69–102; Brenda Bolton, “Subiaco – Innocent III’s Version of Elijah’s Cave,” *Studies in Church History* 46 (2010): 111–23.
- 65 The bust-length fresco of Pope Innocent in the lunette was added some decades later, around 1280. On this, see Maria Laura Cristiani Testi, “Consolo: Il Maestro del Busto di Innocenzo III e i collaboratori negli affreschi del Sacro Speco di Subiaco,” in *Roma Anno 1300*, ed. Angiola Maria Romanini (Rome: L’Erma di Bretschneider, 1983), 5–14.
- 66 In these exchanges, Gregory drew heavily on the Donation of Constantine to provide a historical account of how popes had become superior to emperors, while Frederick sought to undermine the pope’s power by appealing directly to the College of Cardinals for their support. See Graefe, *Die publizistik in der letzten epoche kaiser Friedrichs II.*
- 67 Herde, “Literary Activities of the Imperial and Papal Chanceries,” 227–39.
- 68 The image of the beast of Revelation was evoked particularly in Gregory’s incendiary letter of 1239, *Ascendit de mari bestia*. A partial English translation is included in McGinn, *Visions of the End*, 173–4; for the Latin edition, see J. Huillard-Breholles, *Diplomatica Friderici Secundi* (Paris: Pion, 1857), vol. 5, part I, p. 327.
- 69 For discussions of the propaganda war and the circulars, see McGinn, *Visions of the End*, 168–80; Hans Martin Schaller, “Das letzte Rundschreiben Gregors IX gegen Friedrich II,” in *Festschrift Percy Ernst Schramm: zu seinem siebzigsten Geburtstag von Schülern und Freunden zugeeignet*, 2 vols. (Wiesbaden: Franz Steiner, 1964), 1:309–21.
- 70 For the surging interest in apocalyptic thinking in the thirteenth century, see Bernard McGinn, “John’s Apocalypse and the Apocalyptic Mentality” and E. Randolph Daniel, “Joachim of Fiore: Patterns of History in the Apocalypse,” in *The Apocalypse in the Middle Ages*, eds. Richard K. Emmerson and Bernard McGinn (Ithaca, NY and London: Cornell University Press, 1992), 3–19, 72–88.
- 71 McGinn, *Anti-Christ*, 33–172; Almond, *The Antichrist*, 77–132; and see [Chapter 3, note 125](#).
- 72 Among the important scriptural passages recounting God’s battles with the sea monster Leviathan (and its related image Rahab) are Job 26:5–16 and 41:1–34, Isaiah 27:1 and 51:9–11, Ezekiel 29:3–5 and 32:2–8, and Psalm 74. These mythological contests between God and the sea dragon drew upon ancient Near Eastern creation narratives such as the Ugaritic Baal Cycle (fourteenth or thirteenth century BCE), in which Baal overcomes the forces of chaos by slaying the marine monsters Yam and Nahar (lit. sea and river). See Day, *God’s Conflict with the Dragon and the Sea*; also “Monsters,” in *Dictionary of Biblical Imagery*, eds. Ryken et al., 562–5.
- 73 On the sea as a symbol of chaos in the Bible, see Day, *God’s Conflict with the Dragon and the Sea*; “Sea,” in *Dictionary of Biblical Imagery*, eds. Ryken et al., 765–6. For the fish or whale in the Jonah story as Leviathan, see Scott B. Noegel, “Jonah and Leviathan: Inner-Biblical Allusions and the Problem with Dragons,” *Henoch* 37:2 (2015): 236–60.
- 74 On Muhammad as an Antichrist figure, see Suzanne Conklin Akbari, “The Rhetoric of Antichrist in Western Lives of Muhammad,” *Islam and Christian–Muslim Relations* 8 (1997): 297–307; Almond, *The Antichrist*, 126–32.
- 75 Ezekiel 29:3.
- 76 Day, *God’s Conflict with the Dragon and the Sea*, 38–49.
- 77 “Song of Moses” is the term used by scholars to describe Exodus 15.
- 78 Also Job 26:12: “By his power he stilled the sea; by his understanding he shattered Rahab.”

- 79 Quoted from Frances Andrews, "The Influence of Joachim in the 13th Century," in *A Companion to Joachim of Fiore* (Leiden and Boston, MA: Brill, 2017), 190–266, at 249.
- 80 Biblioteca Apostolica Vaticana, Vat. lat. 3822, fol. 5r (*Liber de oneribus prophetarum*).
- 81 On the image, see Robert E. Lerner, "Frederick II, Alive, Aloft, and Allayed in Franciscan-Joachite Eschatology," in *The Use and Abuse of Eschatology in the Middle Ages*, ed. W. Verbeke (Leuven: Leuven University Press, 1988), 359–84, esp. 376–9; Hubert Houben, "Federico II come settima testa del drago apocalittico," in *Il Ricordo del Futuro. Gioachino da Fiore e il Gioachimismo attraverso la storia*, ed. Fabio Troncarelli (Bari: Adda, 2006), 75–9.
- 82 Goodson and Nelson, "The Roman Contexts of the 'Donation of Constantine'."
- 83 Pope Gregory IX quoted in Johannes Fried, *Donation of Constantine and Constitutum Constantini: The Misinterpretation of a Fiction and Its Original Meaning* (Berlin and New York: Walter de Gruyter, 2007), 21.
- 84 Mitchell, "St. Silvester and Constantine," 20; Herzman and Stephany, "Dante and the Frescoes at Santi Quattro Coronati," 106, n. 17.
- 85 Mitchell, "St. Silvester and Constantine"; Sohn, "Bilder als Zeichen der Herrschaft"; Noll, *Die Silvester-Kapelle in SS. Quattro Coronati in Rom*; Draghi, "La decorazione della cappella di San Silvestro"; Schneider, "Bild und Text in der Silvesterkapelle."
- 86 For an overview, see Uta-Renate Blumenthal, *The Investiture Controversy: Church and Monarchy from the Ninth to the Twelfth Century* (Philadelphia: University of Pennsylvania Press, 1988).
- 87 The mosaics were likely executed in the last quarter of the twelfth century. The most thorough analysis of the program and its political context is Ingo Herklotz, "Der mittelalterliche Fassadenportikus der Lateranbasilika und seine Mosaiken. Kunst und Propaganda am Ende des 12. Jahrhunderts," *Römisches Jahrbuch für Kunstgeschichte* 25 (1989): 25–95. See also Stroll, *Symbols of Power*, 30–4.
- 88 Quoted from Fried, *Donation of Constantine*, 23.
- 89 Stroll, *Symbols of Power*, 31–2.
- 90 *Ibid.*, 30–1.
- 91 For the varied functions of scrolls in medieval art, see Nino Zchomelidse, *Art, Ritual, and Civic Identity in Medieval Southern Italy* (University Park: Penn State University Press, 2014), 36–41; also Theodor Birt, *Die Buchrolle in der Kunst: archäologisch-antiquarische Untersuchungen zum antiken Buchwesen* (Hildesheim: Olms, 1976). For the "traditio legis" motif and its variants, see Mikael Bøgh Rasmussen, "Traditio legis?," *Cahiers Archéologiques Fin de l'Antiquité et Moyen Age* 47 (1999): 5–37; Lasse Hodne, "The 'Double Apostolate' as an Image of the Church. A Study of Early Medieval Apse Mosaic in Rome," *Acta ad Archaeologiam et Artium Historiam Pertinentia* 20:6 (2007): 143–62; Galit Noga-Banai, "Dominus legem dat: von der Tempelbeute zur römischen Bildinvention," *Römische Quartalschrift für christliche Altertumskunde und Kirchengeschichte* 110:3–4 (2015): 157–74; Armin F. Bergmeier, "The Traditio Legis in Late Antiquity and Its Afterlives in the Middle Ages," *Gesta* 56:1 (2017): 27–52.
- 92 Berenbeim, *Art of Documentation*.
- 93 Stefano also appears to have handled the protracted legal dispute between his father, Riccardo Conti, and Frederick II regarding lands originally seized by Riccardo in order to secure the title of Count of Sora, and later reclaimed by Frederick. See Dykmans, "Riccardo Conti," 28:466–8.
- 94 Aaron Peltari, *The Psychomachia of Prudentius: Text, Commentary, and Glossary* (Norman: University of Oklahoma Press, 2019), 19–23.
- 95 Quintilian, *Institutio oratoria*, 8.6.44–59.
- 96 The allegorical (or typological or figural) understanding of scripture was developed especially in the thought of patristic scholars such as Justin Martyr (d. ca. 165 CE), Irenaeus (d. 202 CE), Clement of Alexandria (d. 215 CE), and Origen (d. 251 CE), who drew upon the interpretive methods established by the first-century CE Alexandrian thinker Philo,

- who had in turn expounded the dependency of Greek philosophy on the Jewish Torah. The theology developed by early patristic exegetes departed from prevalent Gnostic traditions, which rejected the Old Testament and denied the divinity of Christ. Instead, scholars such as Irenaeus, Clement, and Origen argued for the unity of the Old and New Testaments, the singleness of Christ and the Jewish Old Testament God, the historical reality of biblical events, and the divine origins of scriptural writings. See John O'Keefe, "Alexandrian Exegesis," in *Encyclopedia of the Bible and Its Reception* (Berlin and New York: Walter de Gruyter, 2009), 1:764–8; O'Keefe and Reno, *Sanctified Vision*.
- 97 David Dawson, "Figure, Allegory," in *Augustine Through the Ages: An Encyclopedia*, ed. Allan D. Fitzgerald (Grand Rapids, MI and Cambridge: William B. Eerdmans Publishing, 1999), 366–8; David Dawson, "Transcendence as Embodiment: Augustine's Domestication of Gnosis," *Modern Theology* 10:1 (1994): 1–26; Jean Pépin, "Saint Augustine et la fonction protréptique de l'allégorie," *Recherches Augustiniennes* 1 (1958): 243–86; L. M. Poland, "Augustine, Allegory, and Conversion," *Literature and Theology* 2:1 (1988): 37–48.
- 98 Dawson, "Figure, Allegory," 367; see also Erich Auerbach, "Figura," in *Scenes from the Drama of European Literature* (Minneapolis: University of Minnesota Press, 1984), 9–76, esp. 39–45; Robert William Bernard, "In Figura: Terminology Pertaining to Figurative Exegesis in the Works of Augustine of Hippo" (PhD diss., Princeton University, 1984).
- 99 David Dawson describes his usage of *figura* as follows: "When Augustine writes that Noah's ark is a *figura* of the city of God on pilgrimage in this world, he is not simply referring to the word 'ark' as it is found in the text of the Bible; the ark as *figura* is the actual, physical ark that Noah built (civ. Dei 15.26). That ark finds its counterpart in the city of God, which, as a reality in its own right, establishes a relation to the former ark that provides its deeper or more fully realized meaning." See Dawson, "Figure, Allegory," 366.
- 100 The scrolls with textual excerpts, which are in all cases but one exhibited by the allegorical figures, could be seen as a third level of signification.
- 101 See the many examples discussed in Katzenellenbogen, *Allegories of the Virtues and Vices* and Norman, *Metamorphoses of an Allegory*. Important examples of the purely personificational scheme that postdate the Santi Quattro Coronati frescoes are the sculptures on the doorway in the chapterhouse of Salisbury Cathedral (ca. 1260–70), and the portal sculptures in Strasbourg Cathedral (ca. 1280–90). See Rosalie B. Green, "Vices and Virtues in the Chapter House Vestibule in Salisbury," *Journal of the Warburg and Courtauld Institutes* 31 (1968): 148–58; Paul Williamson, *Gothic Sculpture: 1140–1300* (New Haven, CT: Yale University Press, 1995), 193–5.
- 102 James J. Paxson, *The Poetics of Personification* (Cambridge and New York: Cambridge University Press, 1994), 63–81.
- 103 *Ibid.*, 75–6.
- 104 Prudentius, *Psychomachia*, 282–3 (lines 40–70), 298–301 (lines 278–312), and 302–11 (lines 344–453).
- 105 Paxson, *The Poetics of Personification*, 63–81, esp. 65–77.
- 106 Prudentius, *Psychomachia*, 328–9 (lines 716–25).
- 107 The Roman legal principle of *lex talionis* and its biblical equivalent, "eye for an eye, tooth for a tooth" (Exodus 21:24–25), were expressions of a concept of justice found across manifold cultures, societies, and religious systems. It underpinned Dante's notion of *contrapasso*, or "counter-suffering," which was deployed as the primary method of bodily punishment in the *Inferno*. See Andrew Waldron, "Lex Talionis," *Arizona Law Review* 34 (1992): 25–51; Peter Armour, "Dante's *Contrapasso*: Context and Texts," *Italian Studies* 55 (2000): 1–20. Bärbel Beinbauer-Köhler, Eckart Otto, Gottfried Reeg, Birgit Krawietz, and Werner Ogris, "Talion," in *Religion Past and Present: Encyclopedia of Theology and Religion*, eds. Hans Dieter Betz, Don S. Browning, Bernd Janowski, and Eberhard Jüngel (Leiden and Boston, MA: Brill, 2012), 12:475–9.
- 108 Furthermore, as Roberts argues, "the physical dismemberment finds its linguistic counterpart in the 'dismembering' of the sentence (i.e., its breaking up into cola and commata)."

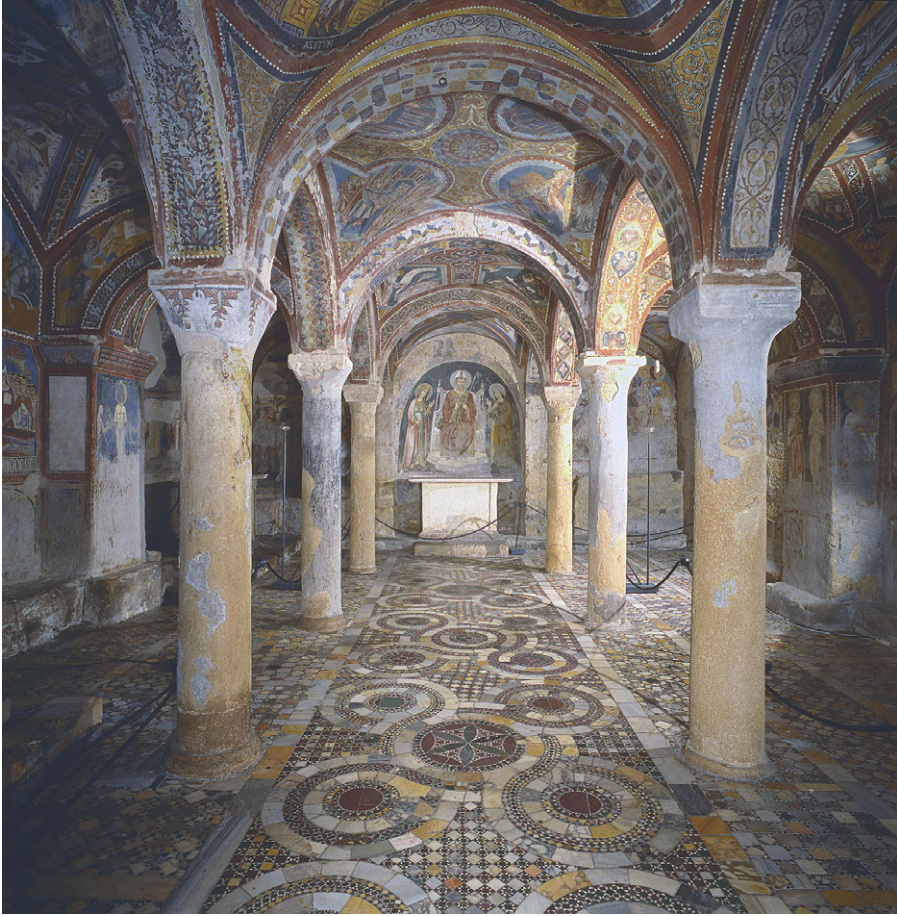
- See Michael Roberts, *The Jeweled Style Poetry and Poetics in Late Antiquity* (London and Ithaca, NY: Cornell University Press, 1989), 29.
- 109 Paxson, *The Poetics of Personification*, 69.
- 110 Brussels, Bibliothèque Royale ms 9987-91. Dated to ca. 890.
- 111 Gérard Genette, *Narrative Discourse: An Essay in Method*, trans. Jane E. Lewin (Ithaca, NY: Cornell University Press, 1980), 33-85, 234-7; Debra Malina, *Breaking the Frame: Metalepsis and Construction of the Subject* (Columbus: Ohio State University Press, 2002), 1-25.
- 112 Viewed through this lens, the biblical and historical characters “transgress” into the cycle’s allegorical realm to serve functions that are intertwined in complex ways.
- 113 Ernst Harnischfeger, *Die Bamberger Apokalypse* (Stuttgart: Urachhaus, 1981); Peter Klein, “Medieval Apocalypse Cycles and Eschatological Expectations: The So-Called ‘Terrors’ of the Year 1000,” in *L’Apocalisse nel Medioevo*, ed. Rossana E. Guglielmetti (Florence: Sismel, 2012), 265-301.
- 114 For the inscription, which reads “*Jussa Dei complens. Mundo sis corpore splendens. Poeniteat culpae. Quid sit patientia discere*,” see Katzenellenbogen, *Allegories of the Virtues and Vices*, 15, n. 3.
- 115 See the discussion in *ibid.*, 15-16. The author identifies (on p. 15, n. 3) the virtues as God-Fearing Obedience (with Abraham), Purity (with Moses), Penitence (with David), and Patience (with Job), with reference to Isidore of Seville’s *De ortu et obitu patrum* (Migne, ed., *Patrologiae Cursus Completus*, vol. 83, 133ff.).
- 116 Bayerische Staatsbibliothek Clm. 13002, fols. 3v, 4r. For the manuscript, see also Elisabeth Klemm, “Die Regensburger Buchmalerei des 12. Jahrhunderts,” in *Regensburger Buchmalerei von frühkarolingischer Zeit bis zum Ausgang des Mittelalters* (Munich: Bayerische Staatsbibliothek, 1987), 39-58; Adam S. Cohen, “Making Memories in a Medieval Miscellany,” *Gesta* 48 (2009): 1-18.
- 117 These stories of Mordechai and Haman are recounted in the Old Testament Book of Esther (Haman’s hanging is in Esther 7:10; the honoring of Mordechai is in Esther 6:11). For a discussion of the scenes, see Cohen, “Making Memories,” 141.
- 118 The quality *mansuetudo* is difficult to translate with precision. In his discussion of the virtue in the context of Chaucer, Stephen Henry Rigby explains “mansuetudo, the virtue that relates to evil deeds which are done to us . . . lacks a precise modern equivalent but is often translated as ‘patience’, ‘gentleness’ or ‘meekness’ since it is the virtuous mean between, on the one hand, the wrath which seeks excessive and irrational revenge for harms done to us and to others and, on the other, the ‘inirascibilitas’, the insufficient anger and ‘wommanliche’ excess of mercy which makes us too mild in punishing evil.” Stephen Henry Rigby, *Wisdom and Chivalry: Chaucer’s Knight’s Tale and Medieval Political Theory* (Leiden: Brill 2009), 64.
- 119 The scroll held by the Daughter of Sion quotes Psalm 9, which is attributed to David. Verse 9:14 links the daughter of Sion to Jerusalem: “that in the gates of the daughter of Zion I may rejoice in your salvation.” The scroll held by the Daughter of Babylon appears to reference Revelation 17:2 – “with whom the kings of the earth have committed sexual immorality, and with the wine of whose sexual immorality the dwellers on earth have become drunk” – and 17:5-6: “And on her forehead was written a name of mystery: ‘Babylon the great, mother of prostitutes and of earth’s abominations.’ And I saw the woman, drunk with the blood of the saints, the blood of the martyrs of Jesus” (English Standard Version).
- 120 The story of Croesus and *Fortuna* derived from Herodotus, who recounted a meeting between Croesus and an Athenian wise man named Solon, who warned the king of the capriciousness of fortune and of associating earthly riches with true happiness. The story of Croesus’s capture by Cyrus was described by *Fortuna* as one of her exemplary deeds in Boethius’s *Consolation of Philosophy* (2.2:11). See Helen H. Law, “Croesus: From Herodotus to Boccaccio,” *The Classical Journal* 43:8 (1948): 456-62; Boethius, *Theological Tractates: The Consolation of Philosophy*, trans. H. F. Stewart, E. K. Rand, and S. J. Tester, Loeb Classical Library 74 (Cambridge, MA: Harvard University Press, 1973).

- 121 Bruce Cole, "Virtues and Vices in Giotto's Arena Chapel Frescoes," in *Studies in the History of Italian Art, 1250–1550* (London: Pindar Press, 1996), 337–63; also Andrew Ladis, *Giotto's O: Narrative, Figuration, and Pictorial Ingenuity in the Arena Chapel* (University Park: Pennsylvania State University Press, 2008), 15–52.
- 122 For a compelling analysis of the "clearly defined" formal treatment of the virtues and the "disarrayed" characteristics of the vices at Notre Dame Cathedral, see Aden Kumler, *Translating Truth: Ambitious Images and Religious Knowledge in Late Medieval France and England* (New Haven, CT: Yale University Press, 2011), 176–8.
- 123 Charlotte Schoell-Glass, "En grisaille – Painting Difference," in *Text and Visuality: Word and Image Interactions III*, ed. Martin Heusser (Amsterdam and Atlanta, GA: Rodopi, 1999), 197–204.
- 124 Ladis, *Giotto's O*, 28.
- 125 Suzanne Conklin Akbari, *Seeing through the Veil: Optical Theory and Medieval Allegory* (Toronto: University of Toronto Press, 2004), 96–113.
- 126 *Ibid.*, 105.
- 127 *Ibid.*, 107.
- 128 As Akbari showed, these developments reflected scientific changes, particularly in the field of optics, which, through its embrace of "species-theory," raised doubts about the capacity of vision to provide unfiltered access to the world of things. According to this theory, objects generate visible forms which are continuously reproduced through the medium of diaphanous air until they reach the human eye. What humans see are therefore visual impressions, or copies, of the original object of vision; our knowledge of perceived objects is thus analogical rather than direct. See *ibid.*, 21–44, esp. 42–4. On the relation of medieval optics to theories of knowledge, see Katherine Tachau, *Vision and Certitude in the Age of Ockham: Optics, Epistemology, and the Foundations of Semantics, 1250–1345* (Leiden and New York: Brill 1988).
- 129 These debates are best known for their attention to the problem of universal categories and the contrary positions taken by "realist" and "nominalist" philosophers. Realism was the belief that universal categories existed as real things outside of the realms of thought and language; nominalism held that universals exist only in the human mind as useful rubrics for making sense of particulars with shared characteristics. Most medieval thinkers positioned themselves somewhere in the middle. Two useful overviews are William J. Courtenay, *Ockham and Ockhamism: Studies in the Dissemination and Impact of His Thought* (Leiden and Boston, MA: Brill, 2008); Claude Panaccio, "Universals," in *Oxford Handbook of Medieval Philosophy*, ed. John Marenbon (Oxford and New York: Oxford University Press, 2012), 385–402.
- 130 Avitsland, *Imagining the Human Condition*, 95; Frugoni, "Chiesa e lavoro agricolo," 338–41.
- 131 Ned Markosian links the idea of time as "an empty container into which things and events may be placed" to Platonic philosophy. See Ned Markosian, "Time," in *The Stanford Encyclopaedia of Philosophy* (2002), <<https://plato.stanford.edu/entries/time/>>, accessed May 7, 2021.

FIVE

VISUAL AND MATERIAL ENTANGLEMENT IN THE ANAGNI CRYPT

THE SAME PAINTERS WHO DECORATED CONTI'S GREAT HALL AT SANTI QUATTRO Coronati produced the sprawling network of paintings in the crypt of Anagni Cathedral just a few years earlier, during the reign of Anagni native Pope Gregory IX (1227–41).¹ This vast expanse of frescoes represents one of the best preserved and most complex figural artworks of medieval Italy. Nearly 6,000 square feet of murals cover all available surfaces of the crypt's interior, including its walls, apses, vaults, window ledges, pillars, columns, and capitals (Figure 5.1). The crypt's mural program presents a strikingly diverse iconographic repertoire encompassing most categories of medieval imagery, from biblical and hagiographical narratives and iconic representations of saints to diagrams visualizing cosmological, medical, and theological concepts. A number of innovative pictorial motifs and compositional devices appear within this scheme, including in the sequence of frescoed vaults above the central aisle, which narrate the travels of the Old Testament Ark across the Holy Land in a distinctly diagrammatic compositional mode. Adding to these innovative pictorial narratives are the unusual cosmological diagrams near the crypt's entrance. This collection of erudite motifs comprises diagrams of the microcosm, the zodiac, and planets, along with a schematic "syzygy" figure outlining the connections between the four elements and their properties (see Figure 1.10). The three cosmological diagrams are accompanied by two frescoed lunettes featuring portraits of four astrologers (no longer



5.1. View of crypt in Anagni Cathedral, ca. 1231–55. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

identifiable), and the ancient physicians Hippocrates (ca. 460–ca. 370 BCE) and Galen (ca. 129–ca. 216 CE).

Scholars such as Andreina Draghi and Serena Romano have noted the potential for interpretive synergy between the Anagni frescoes and the murals in Conti's great hall at Santi Quattro Coronati.² This potential stems in part from significant historical links: The two monuments are roughly contemporaneous (both were created in the years between 1231 and 1255); they were directed at similar audiences (members of the papal court); they were commissioned by members of the same baronial family (the Conti); and they were executed by at least some of the same painters. The two monuments are also thematically tied: Both fresco cycles engaged with the widely adaptable concept of the medieval encyclopedia and both attest to the papacy's intensified interest in worldly knowledge during the central decades of the thirteenth century. Among the most important thematic and artistic correlations between

the two monuments is their shared treatment of fresco painting as a medium for philosophical speculation through the visual and spatial representation of encyclopedic knowledge. As at Santi Quattro Coronati, the encyclopedism of the Anagni crypt is further expressed through the environment-forming capacity of the fresco medium. The embrative frescoes in the Anagni crypt extend across the walls, vaults, pillars, and columns and onto the contemporaneous Cosmati floor. Created from innumerable pieces of repurposed marble, the floor's color scheme and whorled patterns integrate with the frescoed surfaces to produce a striking visual unity between architecture, fresco, and mosaic. As a result, viewers could experience the Anagni crypt as an all-encompassing "image" that entwined architecture and pictorial decorations in a formally unified and spatially continuous whole.

Just as the Santi Quattro Coronati murals enable us to view the notoriously enigmatic frescoes in the Anagni crypt in a new light, the crypt's murals help us to understand the philosophical concepts and political ideologies underpinning Conti's great hall. In particular, the collection of cosmological motifs near the crypt's entrance elucidate the philosophical concept upon which both fresco cycles are ultimately based. As we have seen, in Conti's great hall, the distinct unification of architectural space with pictorial decorations pertaining to cosmic and human concepts of time and knowledge offered a lucid presentation of the philosophical idea that humans and the material universe were inextricably linked. In what follows, we examine how the Anagni crypt's visual representations of cosmological theory – diagrams representing the zodiac and planets, the microcosm, and the properties of the four elements – stimulated expansive reflection on medieval concepts of time and the interdependency of the human body and the material world. As we will see, the courtly viewers for whom these images were intended understood medicine and astrology as ways of furnishing humans with a measure of agency in relation to time. The Anagni mural focused attention on the utilitarian potential of these sciences by situating them within a larger pictorial program that, in its encounter with its beholders, dramatized the very conditions astrology and medicine were believed to mitigate.

ASTROLOGY, MEDICINE, AND TIME

The cosmological paintings at the entrance to the crypt are organized around two lunette-shaped frescoes that position astrology and medicine as tools for mitigating the temporality and materiality of the human condition. In the best preserved of the two lunettes, located in the second bay, two bearded men identified as Hippocrates and Galen sit in a cavernous dwelling surrounded by scrolls, medicine jars, and urine flasks ([Figure 5.2](#)). Iconographic attributes, including their white hair, sumptuous cloaks, and curious jeweled caps,



5.2. Hippocrates and Galen as representatives of medicine, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

identify the figures as sages whose knowledge is rooted in the aura of antiquity. The scene evokes a moment of intellectual discourse. Hippocrates, on the right, appears to be explaining some scientific principle to his Roman counterpart, who in turn eagerly writes this lesson down in a codex. Between the men, two books displayed outward are inscribed in crisp capitals: “That which is in this world results from the concatenation of the elements; It is from these that all things created are formed.”³ Their conversation, it would appear, concerns the human body’s connected relation to the material world.

The other lunette serves as a thematic pendant, representing the branch of science that writers of the period referred to interchangeably as astronomy or astrology (Figure 5.3).⁴ Like its companion image, the astrological lunette represents a discipline via portraits of its authoritative practitioners. In its current state of preservation, large parts of the fresco have faded and the image’s inscriptions are largely illegible. Still, the basic outlines of the



5.3. Enthroned saint flanked by four representatives of astrology, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

composition can be made out: Four enthroned astrologers flank a haloed, elevated figure wearing a liturgical vestment that identifies him as an ecclesiastic, possibly a bishop. Without halos and dressed in the manner of ancient philosophers, the four lateral figures can be understood as non-Christian authorities on astrology and, presumably, the authors of astrological texts, as indicated by their scrolls and codices. The astrologers serve as exemplary exponents of the science of the stars, a function equivalent to that of Hippocrates and Galen in the adjacent lunette.⁵ As a whole, the scene suggests a cautious but ultimately positive attitude toward astrology. Rather than being trampled as sinners or heretics, the four sages appear as the saint's intellectual interlocutors. The lunette thus integrates astrological knowledge within an overarching Christian belief system, demonstrating the compatibility between two alternative ways of understanding the distinctly temporal nature of human existence.

The two emblems anchor their respective fields of knowledge in the writings of ancient scientists. The paintings were likely executed in the second quarter of the thirteenth century, a historical moment when scientific texts attributed to Greco-Roman and Islamic thinkers were being reintroduced into Latin cultural life in ever increasing volumes.⁶ Members of the thirteenth-century papal court, who frequently resided in Anagni, and for whom the crypt's murals were probably intended, were at the forefront of this intellectual

movement.⁷ To such curial spectators, the juxtaposition of medical and astrological motifs in the Anagni crypt would likely have prompted reflection on the utilitarian potential of these closely intertwined branches of knowledge. Like their counterparts in the secular courts of the period, members of the curial elite viewed astrology and medicine as powerful intercessors between humans and time. By lengthening the human lifespan, medicine could provide a member of the papal Curia additional time to accrue and exercise political power. The utility of astrology was its perceived ability to prognosticate future happenings, which could be turned to strategic advantage in the realm of politics.⁸

Viewers studying the lunettes were meant to connect them to a series of adjoining pictorial motifs more commonly seen in cosmological manuscripts. In the groin vault above the astrologers, a circular diagram depicts the twelve zodiacal signs and the planets organized in concentric orbits (Figure 5.4). In the



5.4. Vault diagram above astrological lunette showing zodiacal signs and planets, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.



5.5. Vault diagram above Hippocrates and Galen showing the microcosm, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

adjacent vault, above Hippocrates and Galen and complementing the image of the night skies, a concentric *rota* of the microcosm shows a nude figure surrounded by the elements, the seasons, and the humors (Figure 5.5). Another diagram outlining the interconnections between the four elements and their physical properties appears on the pillar adjoining Hippocrates and Galen (Figure 5.6). The crypt's courtly spectators could connect this set of images through a series of intersecting readings pertaining to the generative power of the elements; the purported clairvoyance of astrology; and the human body's corruptibility. Viewers could produce such interpretive schemes by responding to visual cues – a suggestively worded inscription, say, or an element of compositional symmetry – and by supplying previously acquired knowledge from memory.

The collection of cosmological images focuses attention on the crypt's capacity to generate philosophical thinking through spectator collaboration.



5.6. Diagram of the four elements and their overlapping qualities, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

While all paintings rely on their beholders to produce meaning, the Anagni frescoes evince a particularly deep engagement with the interdependence of images and viewers.⁹ This concern with different forms of dependence plays out through iconographic motifs such as the microcosm and the elemental diagram, which foreground the conception of a connected world where all things are purposefully bound. More broadly, interdependency defines the distinct viewing experience produced by a monument that not only engages sight, memory, and intellect but also demands sustained bodily involvement from beholders.¹⁰ The crypt's interior is entirely blanketed in fresco; even its columns, capitals, and window embrasures are painted (see [Figures 1.11](#) and [1.12](#)). This all-encompassing mode of figuration embraces architectural space and taxes the spectatorial capacities of beholders. Thirteenth-century viewers were required to practice a kinesthetic, aggregative form of looking that involved tracing a complex, labyrinthine pictorial program with their bodily movements. Whereas previous scholarship has sometimes viewed the mural's profound complexity and associated interpretive difficulty as an aesthetic drawback, this study treats that interpretive difficulty as a generative force that imparts non-representational meaning to the monument's manifold spectatorial itineraries.¹¹ The experience of interpretive limitations as both cognitively and bodily sited reinforces the painted crypt's broader thematic aim: to encourage reflection on the compensatory potential of astrology and medicine vis-à-vis humanity's material and temporal entanglement.

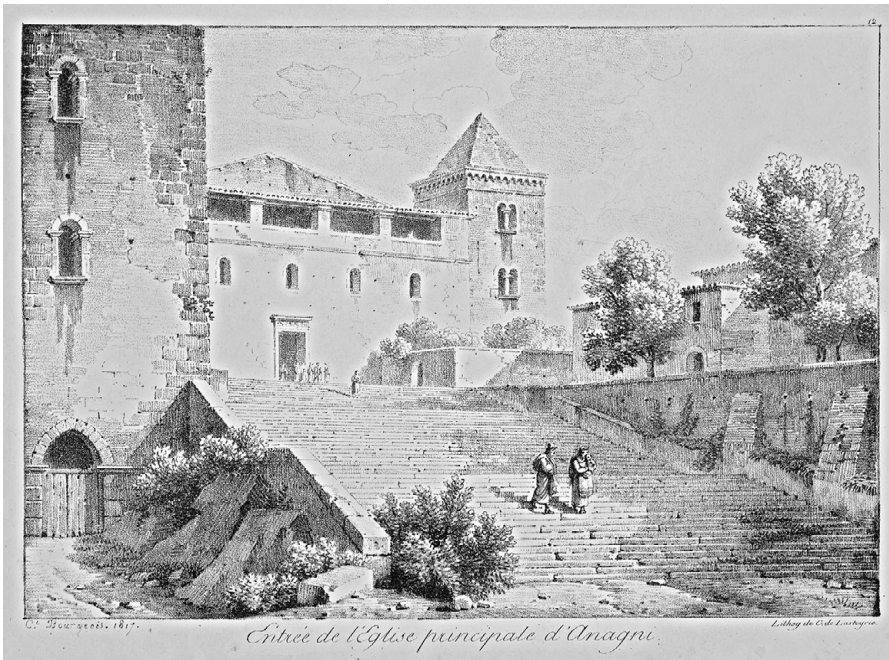
A more complete understanding of the generative potential of the Anagni mural requires consideration of the agentive capabilities attributed to astrology and medicine in the thirteenth century. Members of the thirteenth-century papal court harbored significant anxiety about health and the fleetingness of time. Popes wanted to exercise their significant power for as long as possible, but, as anyone familiar with papal biographies would have known, their time was typically short. Cardinals, too, grappled with the tension between health and the nature of time because death was the ultimate obstacle to their continued advancement within the curial hierarchy. Any cardinal aspiring to the papacy needed not only to maneuver the complex climate of political competitiveness within the Curia, but also to outlive whoever was currently sitting on Saint Peter's chair. At the papal court, life's brevity was therefore a political as well as a philosophical problem. The Anagni frescoes responded to such concerns by promoting astrology and medicine as utilitarian branches of knowledge that were firmly rooted in an authoritative framework of ancient cosmology. Astrological "interrogations" were believed to elicit knowledge of the future, and astrological "elections" could improve one's timing by disclosing the most favorable hour for political action.¹² Medicine's allure, meanwhile, was its perceived capacity to decelerate time by mitigating its corrupting effects on the human body. Such promises of direct and immediate

intervention against time stood in contrast to the comparably quiescent stance assumed by theology with respect to human temporality.¹³ However, rather than compete with theology, medicine and astrology – as their representation in the Anagni mural makes clear – complemented the existing tools offered by religion for coping with the experience of living in time.¹⁴

PARTICIPATORY LOOKING

That papal courtiers found themselves in Anagni in the first place was in part due to increasing consciousness about health.¹⁵ In an era when even minor afflictions could rapidly develop into death-threatening disease, avoiding illness had risen to the top of the curial agenda. Wishing to escape the mosquito-ridden and unsanitary conditions that plagued Rome during the hot summer months, the pope brought his itinerant entourage to cooler locations in the *campagna*, including the village of Anagni. The comparably healthy climate of the small town perched on a hilltop a day's journey from Rome made it a favored countryside residence for the papal court.¹⁶ This was particularly the case in the thirteenth century, when local Anagnian clans emerged as dominant forces in curial politics. The Conti and Caetani families produced an improbable sequence of thirteenth-century popes and cardinals in the period from the reign of Innocent III (1198–1216) to that of Boniface VIII (1294–1303), both of whom traced their roots to Anagni and its surrounding area.¹⁷ It was the papacy of another Anagni native, Gregory IX (1227–41), that arguably had the most significant architectural and artistic impact on the small town.¹⁸ Gregory built a palace across from the cathedral on the foundations of his childhood home and commissioned the Cosmati family of papal builders to lay a costly marble floor in the crypt of Anagni Cathedral.¹⁹ Two inscribed slabs of marble – one in the floor in front of the main altar, and another embedded in the south wall – record the completion of the Cosmati floor in 1231.²⁰ Although a definite date for the completion of the crypt's fresco program cannot be established, there is relatively broad scholarly consensus that the murals, too, were created during Gregory's papacy.²¹

The recurring visits by the papal court to Anagni account for the crypt's unorthodox display of erudite cosmological, medical, and biblical diagrams alongside more customary hagiographical and funerary scenes. The Curia's presence might also explain the monument's unusual architectural configuration. Whereas today the crypt can be accessed from the upper church via one of two internal staircases, thirteenth-century visitors could enter the lower part of the church only from the town square on the basilica's west side.²² During this period, the west flank was in practical terms the basilica's façade; it was outfitted with a monumental staircase that reoriented the structure toward the town square and Pope Gregory's palace (Figure 5.7).²³ Access to the crypt and



5.7. Constant Bourgeois, "Entrée de l'Eglise principale d'Anagni," 1817, lithograph. British Museum, 1941,0918.69.13. Photograph: British Museum Images.

the adjacent oratory of Thomas Beckett led through an arched doorway located at street level on the west side of the transept (see [Figures 1.8](#) and [1.9](#)).²⁴ Accordingly, the Anagni "crypt" was more than a crypt in the conventional sense: In addition to serving as an extravagantly decorated burial chamber for the remains of local saints, it functioned as a type of palatine chapel for the papal residence located on the opposite side of the piazza. The crypt's functional flexibility is reinforced by the pictorial program, whose immersive sweep, thematic diversity, and general complexity open up manifold interpretive pathways. With no vantage from which to view the whole, spectators were required to practice an intervisual and participatory form of looking, detecting connections between motifs located in different areas and generating readings based on iconographic clues and the spatial distribution of images within the cycle.²⁵

An example of images that establish a dialogue across space is seen in the thematic link between the series of Old Testament narratives relating the travels of the Ark of the Covenant through the Holy Land and the hagiographical stories of Anagni's patron saint, Magnus, whose relics are preserved in the cathedral.²⁶ Displayed across seven vaults, the meandering journey of the Old Testament vessel through Israel and the lands of the Philistines, the subject of the first book of Samuel, is depicted in the form of emblematic diagrams that employ numerous inventive approaches to visual storytelling. The



5.8. Vault from Ark series showing the Ark in four Philistine cities, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

recurring motif of the jewel-encrusted chest representing the Ark connects these Old Testament stories typologically to the scenes depicting the translation of the tomb of Magnus displayed across the middle register of the central apse.²⁷ In one vault, four scenes organized around a central image of the Virgin show the itinerary of the Ark after its capture by the Philistines (Figure 5.8). Compressed into diamond-shaped pictorial compartments, the related events focus on miracles performed by the vessel, including, at the lower right, the toppling of an idol in the city of Ashdod. The following vault shows the Ark traveling on a cart pulled by two cows as the bejeweled chest is returned to the Israelites after having caused too much trouble for its Philistine captors (Figure 5.9). The vault appears as a unified hemispherical image with an undulating, dark base line and blue skies encircling a central rosette. Its pictorial space incorporates a range of geographical locations and historical events, without a discernible beginning or end. The subsequent vault in the



5.9. Vault from Ark series showing the Ark being returned to the Israelites after having caused too much trouble for its Philistine captors, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Ark series presents yet more strategies for pictorial narrative. At the center of the composition, the pointed arms of a large ornamental cross extend out from a multicolored celestial orb (Figure 5.10). Wedged into the angular recesses of the cross, four narrative scenes relate the Ark's visit to the cities of Beth-Shemesh, where it kills seventy citizens for attempting to look inside the chest, and then Kiriath-Jearim, where it is brought to the house of Abinadab for safekeeping. In contrast to the previous vault, where narrative space was maximized by the elimination of ornament, the Beth-Shemesh fresco places storytelling in a competitive relationship with the outsized ornamental cross that threatens to overrun the entire pictorial field.

The repeated appearance of the Ark and the emphasis on its geographical movement invites viewers to establish a figural connection between the Old Testament narratives and the local legend relating the similarly complex journey of the relics of Magnus. Across the central apse, two scenes stretch



5.10. Vault from Ark series showing the Ark in Beth-Shemesh, where it kills seventy citizens, and in Kiriath-Jearim, as it is brought to the house of Abinadab for safekeeping, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

horizontally, showing, on the left-hand side, the transport of the tomb from the site of the saint's martyrdom near Fondi to the town of Veroli, where his remains performed subversive miracles directed against invading Muslim forces (Figure 5.11). The right half of the apse shows the second leg of the journey with the bier carried in procession from Veroli toward the town of Anagni, where a crowd gathers at the city walls to receive the relics (Figure 5.12). The central placement of the tomb carried aloft on a bier echoes the representation of the Ark of the Covenant, thus uniting the two narratives and foregrounding a structural symmetry between stories of global scope and stories tied to local legend and the topography of Anagni. Most important in the present context is that the connection relies on practices of intervisual looking. Beholders link pictorial motifs located in different areas of the space through a cognitive and physical process.²⁸ This iconographic interplay generates a form of analytical



5.111. View of left side of central apse with images from Revelation above and scenes from the translation of the tomb of Saint Magnus in middle register, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

thinking.²⁹ Such interplay underscores the way in which the crypt renders thinking inseparable from both spectators' bodily actions and the material reality of the figured space.³⁰

As we will see, further inter pictorial connections appear in the cosmological cycle, where the two diagrammatic vaults depicting the zodiac and the microcosm open (at least) two entwined interpretive paths. On one level, the vaults can be read as representing two stages of creation – that of the world, and that of humankind – thus establishing a thematic link that reaches across the interior space of the crypt to the central apse, where images of Revelation envisage the world's apocalyptic end. On a different level, the circular diagrams invite beholders to mentally overlay the microcosm onto the celestial diagram to generate a well-known astro-medical figure that maps the influences exerted by the constellations on the limbs and organs of the human body.



5.12. View of right side of central apse with images from Revelation above and scenes from the translation of the tomb of Saint Magnus in middle register, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Such examples highlight the interactive quality of the fresco program, whereby spectators mobilize latent levels of meaning. In the case of large-scale murals, which splice together painting and architectural space, such two-way communication between image and beholder assumes a discernibly kinesthetic dimension.³¹

Indeed, the Anagni painters appear to have exploited the spatial characteristics of the medium in ways that draw attention to the limitations of embodied viewing. The mural decenters its beholders at every juncture, incessantly positioning them at the threshold of visibility. This interactive quality produces a distinct interpretive difficulty that has in fact led some scholars to offer a negative assessment of the fresco program. According to some accounts, the mural's capacity to disorient viewers is evidence of thematic dissonance or even

the absence of programmatic intent, a shortcoming often ascribed to the complexity of an undertaking involving multiple artists and a prolonged period of execution.³² I argue, by contrast, that the Anagni mural was designed to implicate the viewer's bodily movements and cognitive efforts in the production of meaning. For example, the kinesthetic responses demanded by the groin-vaulted domes can be seen to reinforce the thematic message conveyed by the vaults' paintings. Placed above the heads of observers, the narrative diagrams of the Ark series require viewers to turn their bodies continually as they construct a plausible order of events. The swiveling and neck-craning produce disorientation and lead viewers on detours that thematically echo the circuitous journey of the Old Testament vessel across the Holy Land.³³

On a more fundamental level, the interpretive dynamic between crypt and beholders reinforces the implicit rhetorical claim of the visual program. Murals are to some extent ideal vehicles for pictorial schemes that thematize comprehensiveness, for the requirement that viewers enter into them intensifies their capacity to suggest the presence of all knowledge. Yet, in the Anagni crypt, the real spatial conditions of beholding set the visual program's notional totality in tension with what viewers could actually see, which was always only a part of the whole. The crypt required beholders to study its paintings cumulatively in and across time and space. As such, the actual viewing experience could serve as a potent metaphor for the incremental aggregation of knowledge as a cultural activity – that is, as a metaphor for encyclopedism. The painted crypt positions its viewers not only at visibility thresholds, but also at the boundary separating human knowledge, understood as incomplete and partial, from the encyclopedia's underpinning concept of divine knowledge, understood as timeless and perfect.³⁴

THE MATERIAL MICROCOSM

The collection of cosmological paintings at the entrance to the crypt invites beholders to explore the complex interconnections between medieval theories of materiality and the fields of astrology and medicine. At the most basic level, the microcosmic and celestial vaults illustrate the subject matter on which the ancient astrologers and physicians were considered trustworthy spokespersons. Where Hippocrates and Galen were scholars of the human body, the four astrologers and their saintly moderator are presented as savants of the celestial bodies. Further connections are established through carefully worded inscriptions and cosmological motifs. The appearance of the moon within the physicians' cave would likely have reminded beholders of medicine's astrological dimension, creating a semantic link between the lunette and both vault diagrams. Similarly, the expansive terms of the axiom spelled out at the center of the medical lunette, asserting that all things created are formed from the

elements, allow it to comment on each of the four surrounding motifs. Such thematic nexuses unite the five frescoes in a self-contained ensemble that could be activated by beholders in pursuit of one or another of its possible readings.

One such reading resides in the imagery's manifold allusions to creation, on the basis of which the cycle could be understood as a desacralized account of the genesis of the material world rooted in Platonic cosmology.³⁵ On a different level, as we will see, the paintings incited their courtly observers to reflect on the inescapable condition of mortality and the perceived capacity of astrological medicine to assuage the effects of aging. These two avenues of interpretation were not mutually exclusive. Rather, as the inscriptions on Hippocrates's and Galen's codices make clear, both derived from the same underpinning concept of microcosmic–macrocosmic symmetry, in which the human body and the cosmos share a basic structure and material composition.³⁶ This fundamental analogy stands as a point of departure and final destination for the divergent levels of meaning generated in the cosmological cycle's encounter with its spectators.

The curious diagram that appears on the pillar adjacent to Hippocrates and Galen's dwelling is central to the crypt's speculation on the theme of creation (see [Figure 5.6](#)). The figure stresses the combinatory potential of the four elements, forming a visual complement to the axiom grafted onto the physicians' codices. The elements appear as four white disks stacked vertically on the left and labeled, from top to bottom, as fire, air, water, and earth.³⁷ Forming a central column are six smaller disks with inscriptions spelling out the elements' physical properties: AC(V)TVS (acute), SVBTILIS (subtle), MOBILI(S) (mobile), OBT(V)SA (obtuse), CORPVLENTA (corpulent), and IMMOBILIS (immobile).³⁸ Viewers could connect these traits to their respective elements by tracing the series of thin white lines back and forth within the schematic composition. The diagram depicts "binding together" as a cosmological operation. Known as an elemental syzygy (from the Greek *syzygos*, meaning "yoked together"), it draws on Platonic cosmology and Boethian arithmetic to convey the balance of nature and the generative tension inherent in the elements' oppositional physical characteristics.³⁹ With its upturned rectangular format, the syzygy fresco organizes the elements according to their "natural" locations as defined by mass density, with fire as the lightest element at the top, and earth as the heaviest element at the bottom.

According to Plato's account of cosmological creation in *Timaeus*, earth and fire were the primary and originative elements, whose fundamentally irreconcilable properties had necessitated the generation of two intermediate elements to bridge the qualitative gap between them.⁴⁰ Air and water were therefore placed between fire and earth and bound to them by means of mathematical proportions, "so that as fire is to air, so air is to water, and as air is to water, so water is to earth."⁴¹ The Anagni diagram cites these Platonic ratios by

inscribing the numbers 27, 18, 12, and 8 in Roman numerals next to the elements. In addition to effecting a rational bond, the elemental numbers expressed the created world's three-dimensionality, since "solidity was the only appropriate form for the universe." The numbers 27, 18, 12, and 8 are "solid" numbers because they are the product of three rather than two, producing cubes rather than planes. Thus, 3 cubed (27) is the number of fire; 2 cubed (8) is the number of earth; and the two middle elements correspond to cubes formed by combinations of these primary numbers: $2 \times 2 \times 3 = 12$ is water; and $2 \times 3 \times 3 = 18$ is air. The Roman numerals included in the Anagni diagram therefore operated as a mathematical-physical code that underscored the corporality of the elements that had brought creation about, and, by extension, the embodied tangibility of the created world as such.

Creation theory had for some time been a favored testing ground for probing the affinities between pagan explanations of the cosmos and the biblical understanding of the world's origins.⁴² In the twelfth century, Thierry of Chartres made an attempt to reconcile the secular cosmology of *Timaeus* with the account of creation outlined in scripture.⁴³ Subsuming Plato's cosmogony into an exegetical reading of Genesis, Thierry argued that the biblical narrative can be understood as a veiled prefiguring of the comparably mechanistic explanation provided by Plato. According to Thierry, day and night, land and sea, and plants and animals were all created through natural elemental processes. These natural processes, however, had been set in motion by God, whose initial act had been to create the four elements. The world's creation was therefore a joint operation by natural physics and the *artifex Dei*.

Conrad Rudolph has demonstrated how such intellectual efforts impacted pictorial renderings of Genesis, which increasingly suggested the elements' roles as co-actants in the various stages of creation.⁴⁴ He pointed to the compelling Genesis panels of the twelfth-century Souvigny Bible, which emphasize by pictorial means the dynamically charged state of the four elements (Figure 5.13).⁴⁵ In the first scene, located at the top left, the creator reaches out from a vibrant ring of fire to separate night, represented as the moon, from day, represented as the sun. In the lower half of this frame, a chaotic body of water encloses a fissure of pinkish air, while the fourth element – earth – rests along the bottom of the pictorial field as an inky black fundament. Through color coding and the "gravitational" arrangement of the elemental substances, the image visually suggests that the principles of Plato's cosmogony are somehow already contained within the narrative code of the Bible.⁴⁶ The Genesis account that unfolds across the subsequent folios of the codex accordingly represents the sacred actualization of those principles.

While the Souvigny narratives maintain the presence of the creator across its Genesis panels as the force that creatively shapes elemental matter, the Anagni frescoes advance a comparably desacralized creation theory that downplays the



5.13. The creation of the world according to Genesis, ca. 1175–1200, from Souvigny Bible. Bibliothèque de Moulins fol. 4v. Photograph: Médiathèques Moulins Communauté.

role of the creator God.⁴⁷ The crypt's three diagrams visualize the genesis of the created world as a complex process in which material and mortal things were formed from the interactions of elemental matter. Relative to this theory of elemental generation, the scriptural version of events operates at a subtextual level by means of formal and iconographic allusions to Genesis encoded in the imagery and reliant on active viewer participation. On the level of form, for example, the distinctive circular shapes of the two *rota* diagrams might have reminded beholders of the spherical representations of the cosmos commonly



5.14. View of decorative border with representation of the inferior waters, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Author.

seen in medieval Genesis cycles.⁴⁸ The planetary and microcosmic diagrams could accordingly be perceived as two stages of creation.⁴⁹ Situated at the entrance to the crypt, these concentric shapes were spatially empowered to serve as the beginning of a story that unfolds across the walls and vaults of the subterranean space and concludes dramatically in the central apse.

Such contextual and formal allusions to biblical creation are reinforced at the level of iconography by a relatively abstruse reference to Genesis contained within the arch separating the zodiac vault from the microcosm vault (Figure 5.14). The arch displays a disorderly aquatic scene replete with fantastical creatures set against a dark blue background. With its gloomy atmosphere and deliberate lack of symmetry, this marine frieze distinguishes itself from other ornamental borders in the crypt.⁵⁰ Its placement, lodged between two diagrammatic images of order, led Bjarne Andberg to identify the iconographic motif as a commentary on the separation of the superior waters from the inferior waters as recounted in Genesis (1:7–8).⁵¹ According to Andberg's discerning analysis, the multitude of aquatic monsters, ranging from seductive sirens to dark-skinned fishermen with serpents twined around their bodies, suggests a wet, murky realm corresponding to the inferior waters. This subterranean aquatic domain was commonly interpreted by medieval exegetes as the waters of vice, understood as the unruly remnants of the primordial abyss that

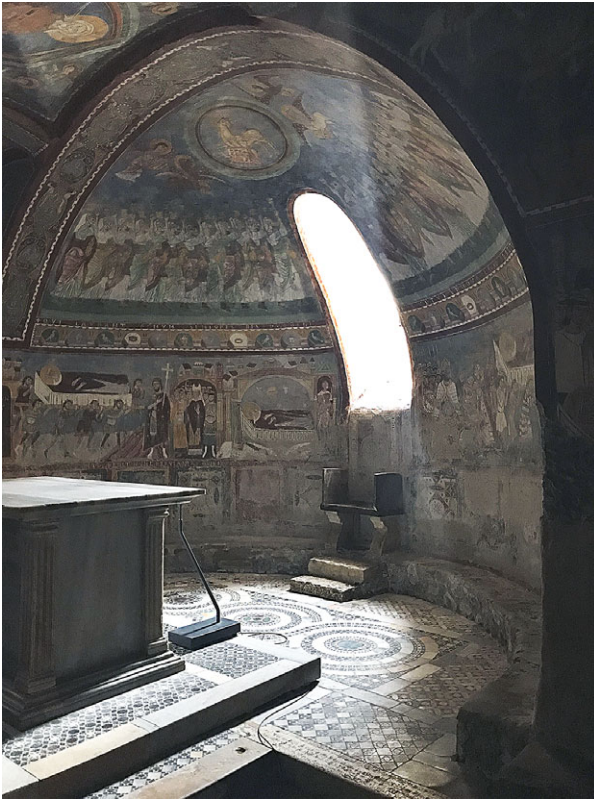
had preceded the making of order in the acts of creation.⁵² The marine frieze in the Anagni crypt is, in other words, a visual representation of a central concept in medieval creation theory: that of *chaos*. Both Genesis and the *Timaeus* were understood to be in agreement on the point that order, or *cosmos*, had been created by the divine *artifex* out of a negative primordial situation of chaos. According to Christian theological thought, chaos was never fully eliminated but instead lingered in the world through the notion of sin, posing a persistent threat to the cosmic order.⁵³ But the term also held cosmogonic import, for the chaos that preceded creation was understood as matter without form, yet ripe with creative potential.⁵⁴ It was from this shapeless *prima materia* that the four elements had been separated. The elements, in turn, were combined in various ways to compose all terrestrial substances – land, sea, plants, animals, and human bodies alike. Importantly, the medieval understanding of primeval matter, transmitted by Calcidius and Isidore of Seville as the Latin *silva* (forest), was imbued with notions of potentiality, or a capacity to morph into something else.⁵⁵ Such recasting of matter as capable of being otherwise had enabled the association of artistic creation with divine creation and, by the end of the thirteenth century, would allow alchemical processes of transmutation to be viewed as legitimately rooted in Platonic philosophy.⁵⁶

The contextual and iconographic allusions to creation near the crypt's entrance connect the cosmological frescoes across space to the expansive vision of Revelation figured in and around the central apse (Figure 5.15). These

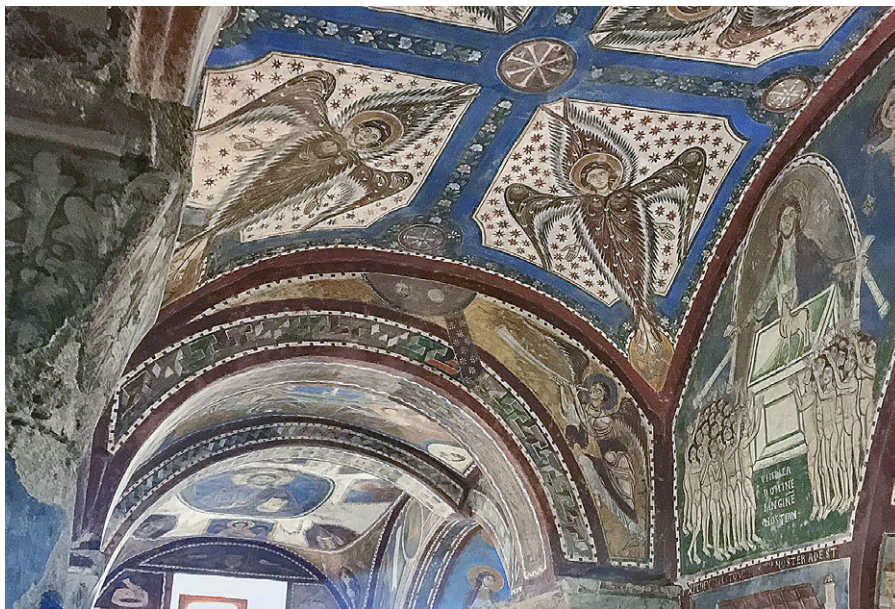


5.15. Composite view of images around central apse, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

images include, in the main apse, the seven-horned lamb of the apocalypse accompanied by the four symbols of the evangelists and the twenty-four elders. On the apse wall are images of the seven riders and the opening of the seals; above the main altar, three vaults show images of the Son of Man, four six-winged cherubim, and four angels restraining the four winds. Although these scenes display Revelation as a sequence of future events, their spatial distribution was not aimed at a sequential reading corresponding to the biblical text – either from left to right, or right to left. Instead, the imagery appears to have been distributed in relation to an observer standing approximately in front of the main altar, for whom the apocalypse unfolded simultaneously in three dimensions and on a monumental scale. A dramatic focal point is established in the apse window through which the light of the outside world breaks in on the painted world of the crypt. The window niche carved out of the masonry assumes the upright posture of a body, allowing the vertical passage of sunlight to suggest a nascent theophany (Figure 5.16).⁵⁷ The fusion of architecture, painting, and natural light thus stages a dramatic preview of the eschaton; the dynamic interplay between different media empowers the



5.16. View of central apse in natural light, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Author.



5.17. Arch with falling stars, ca. 1231–55, crypt, Anagni Cathedral. Photograph: Author.

Revelation frescoes to thematize the juxtaposition of worlds that lies at the heart of John's prophecy. According to the biblical text, the end times events would proceed as *de-creation* – which is to say, a step-by-step rolling back of the cosmic order implemented by the Genesis creator.⁵⁸ This notion of Revelation as creation in reverse was brilliantly evoked in the painting on the small arch below the cherubim vault (Figure 5.17). There, a winged figure blows through a reed while fixing their gaze on a half-sphere with the sun and moon set against a deep red background. A beam of falling stars crosses over and into the decorative frame stretching along the arch periphery to suggest a dissolution of boundaries between one world and the next. The scene evokes the opening of the sixth seal (Rev. 6:12–14), which foretells the end of the cosmos, when the sun would turn black, the moon would turn into blood, the stars of the sky would fall to the earth like figs from a tree, and the sky would vanish like a scroll that is being rolled up.⁵⁹ Understood in relation to the apse program, the transgressive beam of stars on the painted arch could serve as a painted analog to the real light entering through the apse window. Together, these boundary-crossing elements drew attention to the distinction between the painted image of the world that is the Anagni crypt and the reality of the world outside, which, in turn, became a metaphor for that which lies beyond.

The microcosm vault expands the crypt's elemental theory of creation into the realm of the human (see Figure 5.5). Rendered in vivid colors, the diagram elucidates the theory of how humankind, like the material world against which it stands as miniaturized reflection, is formed from interactions between the

elements.⁶⁰ The diagram's fourth concentric zone spells out this process: "MINOREM M(VND)VM SIC EADEM FORMANT ELEMENTA" (Thus the elements form the microcosm). Another inscription, on the green field encircling the nude figure, translates the key term from Greek to Latin: "MIKROCOSMVS ID EST MINOR MVNDVS." Moving outward from this latter inscription, the four quadrants of the diagram outline complex sets of correspondences between a human being's age and the humoral fluids, elements, seasons, elemental qualities, and climatic characteristics.⁶¹ Thus, youth and blood are coupled with air and spring (both identified as warm and humid); adolescence and red bile with fire and summer (both warm and dry); maturity and melancholy with earth and autumn (both cold and dry); and, finally, in the fourth quadrant old age and phlegm are paired with water and winter (both cold and humid). Added to these are four roundels representing life stages by visualizing the process of aging as one of changing physical appearance. As a whole, the diagram therefore entwines in complex ways the idea of a balanced microcosm characterized by elemental harmony with different notions of change, ranging from seasonal and humoral fluctuations to the biological transmutations associated with the body's aging.

The microcosmic diagram's insistence on the body's elemental constitution and cosmic entanglement sheds new light on the significance of Hippocrates's and Galen's codified message. Folding the human body into the broad category of "all things created," the inscription operates as a thematic bridge uniting microcosm, syzygy, and medical lunette in a pictorial treatise on the nature of change. To understand the elements, the images argue, is to understand the inherent shapeshifting capacity of matter. This insight, in turn, opens onto knowledge of "all things." The inscription's implication, therefore, is that, because medicine and cosmology are both concerned with matter's intrinsic capacity to change, the physician (*medicus*) can be understood as a kind of artist (*artifex*), who – like the divine creator, the sculptor, or the painter – labors to give new shape to unruly matter. Medicine targets its healing art at the ideal form that is the balanced microcosm, but in the world of material things this form can be no more than an ideal because the human body is, as per Isidore, by definition corruptible.⁶² As we have seen, the microcosm diagram sets up a tension between elemental harmony and the elements' inherent changeability. The art of medicine, accordingly, is an art devoted to understanding and slackening this tension.

ASTRO-MEDICINE AND THE TEMPORALITY OF ILLNESS

Although the historical Hippocrates had had relatively little to say about the workings of the stars, his thirteenth-century manifestation was regarded as a forceful defender of the use of astrology in medical practice.⁶³ This perception

was in part due to the *Astrologia yppocratis*, a short but very popular treatise describing prognostication according to the moon's aspect and position in the zodiac.⁶⁴ The text was in fact of early Byzantine origin, but it was received by thirteenth-century readers as a genuine work of Hippocrates in whose authority its astro-medical claims were accordingly anchored. In the opening lines, Pseudo-Hippocrates describes knowledge of the stars as an absolute necessity for the medical practitioner, arguing that any doctor ignorant of astronomy is like a blind person stumbling around in the dark.⁶⁵ Hippocrates was not the only scholar whose reputation was reassessed through complex processes of translation, reattribution, and creative extrapolation. Galen, too, was increasingly recognized as a proponent of medical astrology.⁶⁶ The Galenic corpus had seen the addition of treatises such as the *Summary on Crises and Critical Days*, which provided a justification for the use of astrology in medicine, and the *Prognostication of Disease by Astrology*, which advocated the use of astrological charts for predicting the development of a patient's illness.⁶⁷ Consequently, by the time the portraits of Hippocrates and Galen were painted in the Anagni crypt, both ancient physicians were readily understood as authoritative exponents of medicine *and* astrology. The disciplinary boundaries between the two fields of knowledge were becoming increasingly blurry.⁶⁸

Astrology's pertinence to medicine was rooted in the ancient theory of limb assignment, or *melothesia*, which divided the human body according to which parts were under the influence of particular planets and zodiacal signs.⁶⁹ In this medical system, the moon held a particularly prominent place as the force controlling the body's moisture. In the course of its lunar cycle, the planet would cause the humoral fluids to accumulate in different parts of the body; and so, in order to establish diagnoses or determine whether surgery could be performed, it was necessary to know the current lunar position in relation to the constellations. With the moon in Aries, say, an excess of humoral fluids would be collected in the cranium, which made medical intervention to the head highly inadvisable. Interfering with the wrong part of the body at the wrong time could have devastating consequences: The anonymous author of the *Speculum astronomiae* reported witnessing a man "experienced in the science of the stars and in medicine" dying shortly after bleeding himself from the arm with the moon present in Gemini.⁷⁰ Thirteenth-century medical practitioners, ranging from barber surgeons to university-trained physicians, were thus expected to know and make use of melothesian theories of celestial influence when establishing prognoses and planning treatment.

The role of lunar astrology in medical diagnosing explains the moon's curious appearance within the dwelling of Hippocrates and Galen in the medical lunette (see [Figure 5.2](#)). Rendered as a semicircular disk hovering directly above the two doctors, the moon is depicted on the inside of the cave-like chamber alongside urine flasks, medicine jars, and other medical devices.

Aligning precisely with the central axis of the microcosm, the moon's placement leads the eye up toward the nude human figure at the center of the diagram. In this way, the detail served as a reminder of the celestial force exerted by the planet on the body's humoral fluids and the importance of studying lunar positions for understanding and predicting the course of diseases. The lunette's moon is rendered as occupying the astrologically significant position of "square." Visually perceived as a bisected disk, a moon "in square" was, according to Pseudo-Galen, at a particularly powerful juncture in its cycle, a juncture when a turning point in the itinerary of an illness could be expected.⁷¹ On such "critical days," a patient's condition was likely to begin advancing toward either recovery or death, depending on whether the moon's cosmic position in the zodiac could be deemed fortunate or unfortunate.⁷²

As with most things in medieval medicine, timing was everything; and so, for the most accurate prognosis, the physician needed to consider whether the moon had been in a fortuitous or unfavorable position when the illness started (with a "good" lunar starting point more likely to result in recovery, and vice versa). For informed viewers, the sphere hovering above the heads of Hippocrates and Galen was therefore not merely an element of setting, but rather a type of medical instrument that also served as an indicator of time. The moon was the pivot on which the astro-medical system of humors and qualities turned, but it also made time perceivable as the uncontrollable factor in all questions of health, drawing attention to the unpredictability of illness as an aspect of the broader problem of the future's unknowability.

Further astro-medical cues are formally encoded in the cosmological vaults. Positioned side by side and configured by means of matching concentric circles, the zodiac and microcosm frescoes invite viewers to perceive connections between the two motifs, and even to mentally join them into a single composition (see [Figures 5.4](#) and [5.5](#)). Superimposed one atop the other, the microcosm and the planetary diagram conjure the curious pictorial motif known as the *Homo signorum*, which charts the melothesian connections between the body's limbs and the celestial bodies. Known in the Latin West as early as the eleventh century, the motif emerged as the quintessential visual form for medical astrology from the thirteenth century onward.⁷³ A fourteenth-century copy of Guido Bonatti's extensive primer on astrological judgments tucks a compelling example of the *Homo signorum* into the lower right-hand corner of one of its folios ([Figure 5.18](#)).⁷⁴ This colorful rendering shows an adolescent microcosm standing in a grassy field and surrounded by a cosmic sphere populated by the planets and zodiacal constellations. Holding a medicinal plant close to his body, the boy gazes out at the manuscript's reader, seemingly unaware of the dense network of celestial influences that constitute his surroundings. Other variations on the motif showed the zodiacal signs mapped directly onto the body's anatomical regions in the manner of tattoos,



5.18. *Homo Signorum* motif showing the microcosm under stellar and planetary influences, ca. 1380–99, from Guido Bonatti's *Liber astronomiae*. Vienna, Österreichische Nationalbibliothek, Cod. 2359, fol. 52v. Photograph: ÖNB Wien Cod. 2359, fol. 52v.

or they pictured the microcosmic human as though suspended by strings from constellations in the outer cosmos.⁷⁵ The ubiquity of the *Homo Signorum* motif is explained in part by the availability of detailed verbal descriptions of the melothesian system, such as that provided by Abu Ma'shar in his widely circulated *Great Introduction to Astrology*; and in part by the practical functionality of the figure for medical practitioners, evidenced by numerous examples appearing in *vade mecum*s carried around by doctors.⁷⁶

At Anagni, the *Homo Signorum* motif remains an image with the potential to emerge. The lines connecting limbs and stars could be drawn in the minds of astrologically informed viewers, in a manner comparable to the way in which

the figures of the constellations had, presumably, been formed by the interpretive gazes of ancient humans.⁷⁷ Rather than explicitly merging the zodiac and microcosm diagrams into an astro-medical motif, the Anagni frescoes rely on a process of cognitive interplay between wall paintings and spectators. This open-ended structure enables the frescoes to layer multiple compatible readings that effectively await a participative gaze that will steer them variously toward creation theory, astro-medicine, or broader philosophical speculation about microcosmic symmetry.

INCESSANT MORTALITY

Another inscription on the arch forming a border between the medical lunette and the microcosm vault raises the problem of the aging body by asserting that the body's constitution (*complexio*) – its age, appearance, and mood – changes according to its own time (see [Figure 1.10](#)).⁷⁸ Although old age served pictorially as an attribute of intellectual refinement, as evidenced by the portraits of Hippocrates and Galen, the aged human body was widely despised by writers of the period.⁷⁹ Exemplary of this attitude is the treatise authored by the future Pope Innocent III titled *On the Misery of the Human Condition*.⁸⁰ Here, the young cardinal lamented the increasingly depraved state of humankind and described in excruciating detail the degenerative effects of time on the body: As one reaches old age, the head begins to shake, the breath becomes stinky, the face wrinkles, the back bends, the eyes dim, the joints falter, the nose runs, the hair falls out, the touch trembles, the teeth rot, and the ears become dirty. Such outward signs of an aging body were visible reminders of mortality in an era when “human life was shortened more and more.”⁸¹

At the thirteenth-century papal court, as Agostino Paravicini Bagliani has demonstrated, life's transience was increasingly understood through the lens of politics, as the transience of political power.⁸² This perception was especially relevant for pontiffs, in whom extensive executive power was uniquely tied to short life expectancy. Medieval popes were notoriously short lived; in the course of the twelfth and thirteenth centuries, a dozen pontiffs ruled for less than two years after being elevated to the highest office. One of the more extreme cases occurred around the time the Anagni frescoes were painted. In October 1241, Goffredo da Castiglione emerged victorious from a protracted conclave in the Septizonium and decided to take the name Celestine IV. However, the pope-elect did not even survive long enough to see his own coronation ceremony, for after a mere seventeen days his body expired, setting up another vacancy that would last eighteen months.⁸³ The condition of mortality was therefore palpably observable in the occupant of Saint Peter's chair, as Peter Damian had noted two centuries earlier in his treatise *On Brevity*.⁸⁴

The fact that pontiffs dwelled in mortal bodies close to their expiration dates was, in one sense, a practical problem related to the papacy's structure as an electoral monarchy. But as the thirteenth-century Curia came to recognize, it also presented a conundrum with potentially profound implications for the realms of theology and politics, for how could the papacy be a truly everlasting office when its human occupant was merely temporary? The recognition of this tension between perpetuity and mortality created fresh concern for the pope's health and engendered cultural and structural changes at the Curia. On the one hand, new rituals were developed to embrace transience as a defining characteristic of the pope while foregrounding the college of cardinals as the safeguard of institutional continuity.⁸⁵ The most theatrical of new customs was the ritual burning of flax, which was adapted from the Byzantine court and incorporated into the increasingly elaborate papal coronation ceremony. During the coronation proceedings, a piece of fine flax linen would be set aflame before the eyes of the newly elected pontiff while the words "thus passes the glory of the world" (*sic transit gloria mundi*) were recited. The instantaneous consumption of the volatile fabric was meant to dramatize the brevity of life and the transience of papal power.⁸⁶

On the other hand, this growing anxiety about transitoriness, coupled with the notion that the physical health of popes and cardinals was closely tied to the well-being of Christianity, provided both an incentive and a justification for a widespread cultivation of worldly knowledge. A cultural flowering arose as popes and cardinals increasingly hired their own personal physicians, commissioned translations of medical and alchemical treatises, and sponsored new research into procedures for prolonging life (*prolongatio vitae*).⁸⁷ It is not by accident that the fields of study particularly valued by this new generation of highly educated curial members included medicine, astrology, optics, and alchemy. These arts each had some form of curative application, and scholars at the papal court sought to join them in a multifaceted form of medicine devoted to alleviating the negative effects of time on the body.⁸⁸ The earliest results of this pursuit came in the 1240s in the form of a treatise devoted entirely to the topic of rejuvenation: *On Delaying the Symptoms of Old Age* (*De retardatione accidentium senectutis*).⁸⁹ Its author was a courtly scholar known to us only as Dominus Castri Goet, who dedicated his work to Pope Innocent IV (1243–54).⁹⁰ The text incorporated arguments from the Pseudo-Aristotelian *Secret of Secrets* (*Secretum secretorum*), which had been translated about a decade earlier by a papal cleric who allegedly stumbled upon a complete edition of this fabled text while in Antioch.⁹¹ Later, in the 1260s, Roger Bacon would synthesize lessons from these two texts with new theories of optics and alchemy into a grand methodology for delaying old age, which he framed in spiritual terms as a "theology of the body," and whose target audience was Pope Clement IV (1265–8).⁹²

The period's new ideas about aging and rejuvenation centered on the way in which the passage of time increasingly unsettled the body's elemental harmony. As the body ages, it turns progressively colder and drier due to the loss of two of the elemental qualities: heat and moisture. The inscription placed above Hippocrates and Galen and serving as a frame for the microcosm diagram in the Anagni frescoes sets out precisely this principle – namely, that time transforms the constitution of the body. As such, it layers another figurative shadow over the microcosm's compositional and elemental harmony. Whereas the diagram evokes a kind of timeless equilibrium through geometric symmetry, the epitaph declares the fleetingness of this state as a concomitant of time.⁹³ Astrologically informed medicine, as personified by the two ancient doctors, accordingly represents the potential for worldly knowledge to intervene in the process of degeneration. The medicine of rejuvenation developed in the course of the thirteenth century combined traditional principles – e.g., a cold and dry body needs to be warmed up and moistened – with new ideas culled from astrology, optics, and alchemy. Optical instruments could be used to focus beneficial celestial rays in order to “supercharge” foods, precious stones, and medicinal herbs, thereby increasing their capacity to return moisture and heat to an imbalanced body.⁹⁴ Likewise, gold and pearls could be turned ingestible so as to share some of their incorruptible nature with the body and restore its original equilibrium.⁹⁵ Such experimental efforts could be cast as congruous with the work of salvation, for their end goal, as Bacon argued, was to bring about in this world “the condition that will exist in our bodies after the resurrection,” marked by equality of elements and incorruptibility.⁹⁶

The Anagni frescoes do not explicitly venture into the territory of alchemy, but they do lay out the paradigms according to which later alchemical conceits would operate. These paradigms concern the body's corruptible elemental constitution and the central role of time as the medium through which bodily corruption plays out. The paintings could accordingly serve as a backdrop for beholders to contemplate new ideas that promised to impart a measure of agency against conditions in which, as Innocent III had phrased it, “our days pass more swiftly than the web is cut by the weaver.”⁹⁷ Time plays an undervalued role in these developments of art and worldly knowledge. The cultivation of astrology and medicine in painting and scholarly writing betrays a desire to wrest control of time's swift passage, and even potentially to turn back time.

For a more expansive view of the interest of papal court culture in probing the problem of brevity by pictorial means, we can explore two further motifs of mortality found in the Anagni crypt and in the closely related mural cycle at Santi Quattro Coronati in Rome. Across from the crypt's cosmological cycle, a faded scene located at the dado level of the central apse wall depicts Abel's



5.19. Martyrdom of Saint Magnus (above) and Cain's murder of Abel (below, left), ca. 1231–55, crypt, Anagni Cathedral. Photograph: Author.

murder at the hands of Cain (Figure 5.19). Rendered in a form of grisaille, the episode shows the primordial event of human death extracted from its Old Testament context to serve as an exegetical emblem that is typologically connected to the scene placed directly above, which shows the decapitation of Saint Magnus at Ceccano. In its pictorial setting, the death of Abel is foregrounded as an originary moment of martyrdom linked to subsequent martyrdoms from the times of the Old and New Testaments through the long sequence of apostolic and early medieval saints.⁹⁸ Yet, the event also harbored a philosophical undercurrent, in that it marked the point in history when humans became conscious of mortality. Abel could be understood as a figure for life's transitoriness, as Isidore had pointed out.⁹⁹

As discussed in [Chapter 3](#), this interpretation was thematized in the murals at Santi Quattro Coronati, where the fratricide episode appears in a niche designed to accommodate a candle or an oil lamp (see [Figure 3.23](#)). The Roman fresco captures the moment when a menacing Cain is about to deliver a life-ending blow to his brother with a club. Abel lies on the ground with his arms upraised in desperation, seemingly at the threshold of his own death. More than anything, it is the scene's placement at the back of a lamp niche that activates its philosophical dimension; this contextual frame liberates the image from purely narrative obligations and turns it into an explicit reminder of mortality. Beholders would catch sight of the fresco behind a burning lantern, inviting them to contemplate both image and flickering flame as metaphors for human life. The lamp had been a well-established motif for aging and mortality at least since Aristotle, who had compared the impermanence of living organisms to a lamp's flame that burns until the body's inner source of fuel can no longer sustain the fire.¹⁰⁰ More familiar to the fresco's courtly viewers would likely have been Galen's invocation of the lamp motif in his physiological theory of aging. Galen linked the idea of the human body's inner flame to his doctrine of the humors, arguing that a young and healthy body is warm and moist just like a lamp whose fuel is liquid and whose flame is hot; but in the same manner that a lamp slowly runs through its fuel, the body consumes its own heat and moisture, turning progressively colder and dryer until death.¹⁰¹ The frescoed niche at Santi Quattro Coronati thus placed two motifs for life's transitoriness in conversation: The image of primordial fratricide denoted the moment when death as a concept was introduced to humankind; and the burning lamp before the fresco evoked, in the form of a "living image," death as a medical inevitability. The scene's intimacy, moreover, personalized the viewing experience, effectively placing one individual spectator face to face with death, an event certain to occur, yet fraught with temporal uncertainty.

At Santi Quattro Coronati, the lamp niche connects thematically to a second motif of mortality held by the personification of January in the mural's calendar cycle (see [Figure 3.19](#)). Rendered as Janus with a tripartite head looking into past, present, and future, the enthroned January reigns over a world of bountiful supply, a blissful state reinforced by the tree seen on his immediate right in the seasonally improbable state of full bloom. The mural depicts January as a doubly transitional figure associated with the transition into a new agricultural year as well as with the passage from life to death. As we have seen, the spinning rod held in Janus's left hand underlines the significance of the latter.¹⁰² In ancient art, the distaff had functioned as a motif for mortality based on the symbolism of life as a thread severed by death.¹⁰³ In medieval visual culture, the spinning rod took on additional meaning by serving as a token for the manual labor necessitated by humanity's original trespass.¹⁰⁴ Both

significations are active in the Santi Quattro Coronati calendar cycle, which itself is patterned on the first five chapters of Genesis. Like the Old Testament narrative, the first three scenes of the mural's calendar outline the conditional parameters of labor and mortality that structure human existence after the fall: January is symbolic of the age before the fall, immediately followed by toil and death, represented by the personification of February seen clearing away dead shrubs; while March expresses the suffering of the human condition caused by sin, emblemized by a thorn extracted from his foot (see [Figures 3.8 and 3.9](#)).¹⁰⁵ Janus's distaff foreshadows the created world's condition after the fall and reminded viewers that the particular understanding of time advanced by the calendar cycle is decidedly human and thus structured by labor and mortality.¹⁰⁶ As a common attribute of the postlapsarian Eve, the distaff motif at Santi Quattro Coronati also connected the cycle of the months across the space of the painted hall to the figures of Abel and Cain in the lamp niche.¹⁰⁷

The appearance of these images of brevity within a frescoed curriculum of knowledge focuses attention on the relationship between cognition and mortality. This relationship had been addressed around the turn of the fourth century by John Chrysostom, who identified an important epistemological function in the story of Abel and Cain.¹⁰⁸ He interpreted the event from the viewpoint of Adam, who, as external witness to the lifeless corpse of his son, became the first human to possess a cognitive awareness of mortality as a defining characteristic of earthly life.¹⁰⁹ According to Chrysostom, Adam could not be allowed to die first because, if he had, he would not know what death was and would consequently never fully understand the enduring significance of his original sin. As a pivotal event in human history, Abel's death therefore served didactically to turn Adam's relationship to mortality from one of ignorance to one of knowledge. The lamp niche at Santi Quattro Coronati, I argue, builds on the troublesome relationship between mortality and knowledge pertaining in the story of Cain and Abel by layering the lamp motif as a second metaphorical device on top of the painted narrative. This doubling of signification strategies betrays the radical indeterminacy of death as an event that cannot be observed in oneself and that cannot, at least in its essential character, be captured in a visual representation. The lamp niche proposes that death's futurity and finality entail that it can be experienced only via the death of another and represented only by means of symbolic reminders of mortality.

THE CONTINGENCY OF THE HUMAN CONDITION

The problem of mortality's relationship to knowledge is an aspect of living in time. While death is unknowable as personal experience and as an event belonging to the future, it is, paradoxically, *known* as life's inevitable outcome.

The thirteenth century saw intensified engagement with the unknowability of future events, which came to be understood as a defining characteristic of human understanding more generally. According to the thirteenth-century theologian Thomas Aquinas, human knowledge can never be complete because we always see the world from a viewpoint firmly situated in time. Things that have not yet happened with respect to our temporally determinate vantage cannot be known with certainty. Instead, future events – whether occurring by chance, through natural causes, or as the result of human choice – remain simultaneously capable of happening and not happening as long as they belong to the future. Aquinas and other medieval logicians referred to such potential events as “future contingents.”¹¹⁰ In doing so, they drew on Boethius, who had coined the term “contingency” by amalgamating the Aristotelian notion of “possibility” with the notion of “happening,” thereby fashioning a concept that paradoxically denoted the concurrent potentiality and existence of future events.¹¹¹

For both Boethius and Aquinas, contingency became the crucial term for defining human knowledge vis-à-vis God’s omniscience. Human understanding was contingent because it existed *in time*, whereas divine knowledge existed *beyond time* and was therefore infinite and perfect. Describing the divine outlook from eternity, Boethius had invoked metaphors of elevated viewpoints, such as “the watch tower” and “the highest peak of the world,” from where God’s knowledge embraces “all the infinite spaces of the future and the past.”¹¹² Aquinas drew a comparable distinction: A human is like a traveler walking along a road and seeing only his immediate surroundings, for “things reduced to act in time, are known by us successively in time.”¹¹³ God, by contrast, is like a person standing atop a tower who sees the whole road and all its travelers with a glance that is “carried from eternity over all things as they are in their presentality.”¹¹⁴

Against such theologically sanctioned epistemic boundaries, astrology presented itself as a multifaceted discipline for negotiating the temporal fixity of the human vantage.¹¹⁵ Through “interrogations” and “nativities,” a person could procure advance knowledge of a wide range of events, from natural disasters and impending war to future illnesses and even the time of one’s own death.¹¹⁶ Thus, in the handbook for rulers known as the *Secret of Secrets*, Pseudo-Aristotle forcefully defended the use of astrology to gain political advantage. A ruler should consult the stars before performing even mundane tasks such as eating, getting up, and sitting down – and should above all “not listen to those fools who say that the science of astrology is false and useless . . . for although man cannot avoid his fate, yet by knowing it beforehand he prepares himself for it and makes use of the remedies calculated to avert it.”¹¹⁷ Similarly, the author of the treatise known as the *Speculum astronomiae* argued that a person who learns about a future sickness can limit its bodily impact, and

potentially sidestep it altogether, by taking dietary steps to “change his complexion a long time beforehand.”¹¹⁸

The *Speculum* offers precious insight into the state of astrological knowledge at the papal court at midcentury.¹¹⁹ Written by an unknown courtly scholar around 1260, the treatise served as a critical guide to the available astrological texts and to the authors whose arguments, in the scholar’s view, should be considered licit on theological grounds.¹²⁰ This response was prompted by the recent influx of texts translated from Arabic, many of which intricately linked astrological learning with ideas widely considered “necromantic,” and therefore subject to theological condemnation.¹²¹ The availability of such disparate astrological claims appears to have reinvigorated misgivings originally articulated in Late Antiquity about the apparent heresy of astrological foreknowledge vis-à-vis human free will.¹²² The task of the *Speculum*, accordingly, was to reassure courtly skeptics by first extracting licit astrology from the available literature, and then defending the legitimacy of this astrological learning in relation to theological principles – foremost, the concept of free will.

The medical and astrological imagery in the Anagni crypt was painted and viewed in the complex cultural circumstances to which the *Speculum* responded. In broadly similar ways to this treatise, which was written about two decades later, the frescoes can be understood as a calculating apology for the role of extra-theological knowledge within the Christian belief system. The astrological lunette at the crypt’s entrance is emblematic of this approach (see Figure 5.3). As I have argued, the astrologers appear as acolytes rather than condemned pagans, which signals a desire to harmonize the knowledge of the stars, represented by the four sages, with theological concerns, embodied by the enthroned cleric. This relationship of compatibility between saint and sages mirrors the larger-scale relationship between the crypt’s cosmological imagery and its theologically charged pictorial program as a whole. Although we can no longer know the identities of the figures or the exact wording of the inscriptions, it is possible to discern the word “MENSVS” (judged, measured) on the scroll held by the figure to the far right, and a fragmented epigraph spelling “(EVEN)TA FVTVRI” (future events) on the lower border.¹²³ These epigraphs were no doubt carefully worded and indicate that the painting in its original state was designed to define astrological knowledge with some precision. Furthermore, the fragment on the lower border, “future events,” suggests that the lunette’s discursive message in one way or another addressed astrology’s claim to elicit knowledge of the future.¹²⁴ The question of foreknowledge, and the relation of knowledge to time more generally, was therefore likely folded into the painting’s broader speculation about astrology’s relationship to medicine and theology.

The status of future events predicted by astrology was subject to rigorous examination in the *Speculum astronomiae*.¹²⁵ Its author contends that astrological

interrogations represent a particular form of future contingents.¹²⁶ The construction of such predictions through the interpretation of stellar signs serves to elevate the human vantage, affording it glimpses of the future by effectively aligning it for a brief moment with the outlook of divine providence.¹²⁷ Although future happenings perceived by astrology will transpire, for the most part, astrological predictions are not true by necessity.¹²⁸ This is particularly the case with respect to human action, because the stellar forces that affect all earthly things are limited to the human body's elemental matter, leaving the immaterial soul unmoved by celestial influence. It is therefore fully within any individual's power to resist mischievous influences by activating the soul's faculties of reason and free will. A person with knowledge of astrology has the ability to anticipate and thwart harmful impulses and is accordingly better equipped to lead a life attuned to the teachings of theology.¹²⁹ The usefulness of astrology thus emerges with clarity: It is a theologically compatible form of knowledge that offers strategic advantage over those less knowledgeable.

The astrological lunette presents its own form of response to the period desire for elucidation of astrology's clairvoyance by hierarchically installing a Christian saint as both endorser and moderator of the knowledge embodied by the four sages. We might furthermore place the lunette in productive dialogue with its surrounding imagery, which signals an interest in framing the knowledge disclosed by astrology in the context of the body's materiality and humanity's timebound epistemic perspective. First, the celestial vault hovering above the lunette as a representation of astrology's subject matter organizes the constellations in clockwise order from Aries to Pisces (see [Figure 5.4](#)). This clockwise arrangement explicitly anchors observers on "earth" looking up into the celestial firmament.¹³⁰ By contrast, medieval cosmological manuscripts appear to have more commonly organized the sequence of signs in a counter-clockwise order, as seen in the precisely drawn zodiac in the twelfth-century Walters cosmography ([Figure 5.20](#)).¹³¹ The manuscript provides a view of the stars from an imagined vantage point beyond the universe, corresponding to that found on celestial globes. Such views of the cosmos envision the spectator as an all-seeing and bodiless eye, akin to the view "from the watch tower" invoked by Boethius and Aquinas to define God's omniscient outlook. The Anagni vault inverts this perspective by encoding a decidedly earthbound point of view into its stellar arrangement. Considered in relation to the surrounding imagery's emphasis on the body's material and temporal constitution, the zodiac's organization emerges as a metaphor for the embodied and temporal viewpoint that conditioned human understanding and that astrology promised to raise aloft.

Second, the relation of astrological influence to the material body and immaterial soul further clarifies the overt stress on materiality in the images of the adjacent bay. The body depicted in the microcosm vault as the object of



5.20. Diagram of the zodiac from the so-called Walters cosmography, late 12th century. Walters Art Museum, Baltimore, MS W73, fol. 1r. Photograph: Walters Art Museum / Creative Commons License.

medicine and the recipient of celestial impulses is presented as a “material thing” circumscribed by its broader material reality (see [Figures 1.10](#) and [5.5](#)). The microcosm fresco therefore holds up a metaphorical mirror to spectators standing beneath who experience their own entangled presence in the painted world of the crypt. These spectators are, at the same time, positioned as external to the painted body, which encourages reflection on the crucial divide between susceptible matter and agentive mind emphasized by astrological apologists. This metaphorical loosening of soul from body could, on the one hand, stimulate reflection on corporality as distinctly separate from the mind’s free agency, which, when furnished by knowledge of astrology and medicine, enables one to capitalize on cosmic forces. Yet in staging this hypothetical

separation of mind from matter, the frescoes could only have focused attention on the mind's material entanglement in the body and, in turn, on the body's material entanglement in the crypt.

Considered in its entirety, the Anagni mural scales up the tension between a disembodied view of the whole and the grounded vantage of human beholders. As learning configured in the medium of wall painting, the mural proposes sight as an instrument for acquiring knowledge. In the next gesture, the monument foregrounds the way in which one's temporally and spatially situated vantage point hampers the acquisition of knowledge. Visitors to the crypt encounter a fresco cycle whose all-embracing extent and stylistic uniformity propose a unitary message that in actuality never emerges. Instead, the crypt generates a polyphony of small-scale, overlapping, and complexly intertwined meanings. If the Anagni crypt can be considered to possess a single unitary message, it may well be the contingency that reveals itself in the frustrated pursuit of any such message. By occupying the dialectical space between paintings and beholders, this contingency is experienced by beholders as a defining characteristic of their own temporal and material constitution. The experience of such corporeal and temporal limitations, in turn, directs attention back to the murals at the crypt's entrance and the promise harbored by astrology and medicine to propel the human subject beyond the parameters of ordinary existence.

NOTES

- 1 The date of the Anagni frescoes has been the subject of some controversy. The most important recorded *termini* are the completion of the marble floor and the consecration of the main altar in 1231, and the final consecration of the two lateral altars by Alexander IV in 1255. Scholarship is largely in agreement that the paintings were executed in the period between these two events. In recent decades, art historical discourse has settled on a date range coinciding with Gregory IX's reign. For a thorough discussion of dating, see Tomei, "Gli affreschi: una lettura," 39–48.
- 2 Draghi, *Gli affreschi*, 17–107; Romano, "I cantieri di Roma," 18–22.
- 3 On the left codex: "MUNDI PRESENTIS SERIES MANET EX ELEMENTIS"; on the right codex: "EX HIS FORMANTVR QVAE SVNT QVAECU(M)Q(UE) CHREANTVR." My translation is based on the Italian translation by Cappelletti in *Gli affreschi della cripta anagnina*, 63.
- 4 On the terms "astronomy" and "astrology," see Jean-Patrice Boudet, "Astrology," in *Medieval Science, Technology, and Medicine*, ed. Glick, 61–4.
- 5 The practice of representing sciences by means of their originators or exemplary exponents was a common feature of medieval visual representations of the liberal arts from the twelfth century onward. See Katzenellenbogen, "The Representation of the Seven Liberal Arts," 39–55; Evans, "Allegorical Women and Practical Men," 305–30; Cleaver, *Education in Twelfth-Century Art and Architecture*.
- 6 Richard Lemay, *Abu Ma'shar and Latin Aristotelianism in the Twelfth Century: The Recovery of Aristotle's Natural Philosophy through Arabic Astrology* (Beirut: American University of Beirut, 1962); Jean Jolivet, "The Arabic Inheritance," in *A History of Twelfth-Century Western Philosophy*, ed. Peter Dronke (New York: Cambridge University Press, 1988), 113–48;

- Charles Burnett, "Translating from Arabic into Latin in the Middle Ages: Theory, Practice, and Criticism," in *Editor, traduire, interpréter: Essais de méthodologie philosophique*, eds. S. G. Lofts and P. W. Rosemann (Louvain: Peeters, 1997), 55–78; Dmitri Gutas, *Greek Thought, Arabic Culture* (New York: Routledge, 1998), esp. 29–59; Charles Burnett, "Arabic into Latin: The Reception of Arabic Philosophy into Western Europe," in *The Cambridge Companion to Arabic Philosophy*, eds. Peter Adamson and Richard C. Taylor (Cambridge and New York: Cambridge University Press, 2005), 370–404.
- 7 Paravicini Bagliani, *Medicina e scienze della natura*; Williams, *The Secret of Secrets*, esp. 109–41.
 - 8 On political uses of astrology in the High and Late Middle Ages, see Hilary M. Carey, *Courting Disaster: Astrology at the English Court and University in the Later Middle Ages* (New York: St. Martin's Press, 1992); Laura Ackerman Smoller, *History, Prophecy, and the Stars: The Christian Astrology of Pierre d'Ailly, 1350–1420* (Princeton, NJ: Princeton University Press, 1994); Dieter Blume, *Regenten des Himmels: Astrologische Bilder in Mittelalter und Renaissance* (Berlin: Akademie Verlag, 2000); Robert S. Hand, "The Use of Military Astrology in Late Medieval Italy: The Textual Evidence," (PhD diss., Catholic University of America 2014); Charles Burnett, "The Astrologer's Advice in Matters of War," in *Mantova e il rinascimento Italiano. Studi in onore di David S. Chambers*, eds. G. Rebecchini and P. Jackson (Mantua: Sumetti, 2011), 251–8; John D. North, "Some Norman Horoscopes," in *Adelard of Bath: An English Scientist and Arabist of the Early Twelfth Century*, ed. Charles Burnett (London: Warburg Institute, 1978), 147–61. For a somewhat later perspective, see Monica Azolini, *The Duke and the Stars: Astrology and Politics in Renaissance Milan* (Cambridge, MA: Harvard University Press, 2013).
 - 9 My analysis of interdependencies between beholders and the Anagni crypt is facilitated by interpretive models developed by archeological theorists to describe the dialectics of "entanglement" and "entrapment" in the relations of humans to material things. In Ian Hodder's usage, entanglement describes the complexity of cultural scenarios in which persons and things continually produce relations between themselves that are always both enabling and limiting. Cultural change develops in response to such scenarios and typically results in entanglements of increasing complexity. See Hodder, *Entangled*; also Lindsay Der and Francesca Fernandini, eds., *Archaeology of Entanglement* (London and New York: Routledge, 2016).
 - 10 On the broad sensory engagement elicited from ecclesiastical interiors as complex material realities, see, for example, James, "Senses and Sensibility," 522–37; Bissera Pentcheva, *The Sensual Icon: Space, Ritual, and the Senses in Byzantium* (University Park: Penn State University Press, 2010).
 - 11 For a perspective on the philosophically edifying functions of difficulty and "interpretive failure," see Brett Rothstein, *The Shape of Difficulty: A Fan Letter to Unruly Objects* (University Park: Penn State University Press, 2019).
 - 12 For the theory and practice of astrological elections, see Hand, "The Use of Military Astrology in Late Medieval Italy," esp. 47–50, 170–3; H. Darrel Rutkin, *Sapientia Astrologica: Astrology, Magic and Natural Knowledge, ca. 1250–1800. Volume 1: Medieval Structures (1250–1500): Conceptual, Institutional, Socio-Political, Theologico-Religious and Cultural* (Cham: Springer, 2019), 164–6.
 - 13 According to long-established doctrine, humanity's temporal condition and incognizance with regard to future events were by-products of original sin and the principle of free will. Similarly, bodily degeneration was understood as an enduring effect of the fall. Meanwhile, from a theological perspective, bodily rejuvenation, or "purification," was dependent on the outcome of eschatological proceedings at the end of time. On the latter, see Caroline Walker Bynum, *Christian Materiality: An Essay on Religion in Late Medieval Europe* (New York: Zone Books, 2015), 232; Caroline Walker Bynum, *The Resurrection of the Body in Western Christianity, 200–1336* (New York: Zone Books, 1995).
 - 14 For religions as coping mechanisms for the experience of contingency, see Ingo Mörrth, "Contingency (Religious Studies)," in *Religion Past and Present: Encyclopedia of Theology and*

- Religion*, eds. Hans Dieter Betz, Don S. Browing, Bernd Janowski, and Eberhard Jüngel (Leiden and Boston, MA: Brill, 2008), 3:211.
- 15 Pope Gregory IX's biographer ascribes the court's frequent stays in Anagni during the summer months to the pope's desire to avoid Rome's unhealthy air. Paravicini Bagliani summarizes as follows: "The biographer of Gregory IX (1227–1241), on the other hand, speaks regularly of the pope's summer removals, which he attributed to reasons of hygiene and sanitation . . . In 1227, he wanted to spend summer at Anagni 'on account of the menace of the suspect quality of Rome's summer air'. In June 1230, he came to Anagni 'in search of the indulgence of a more clement air,' fearing 'the outbreak of an incendiary summer'; the following year, again in June, he abandoned Rome 'moved by a suspicion of a now imminent summer' . . . in June 1238, he hurried to reach Anagni to 'avoid the harm of suspect air'; the return to Rome (Oct. 1238) was decided upon when 'the perils of summer were already disappearing'." Paravicini Bagliani, *The Pope's Body*, 178.
 - 16 During the reign of Gregory IX (1227–41), the papal court spent a total of 772 days in Anagni. In the course of the thirteenth century, the court resided a total of 3,214 days in Anagni and 360 days in nearby Segni. See Agostino Paravicini Bagliani, "La mobilità della corte papale," in *Itineranza pontificia: la mobilità della curia papale nel Lazio (secoli XII–XIII)*, ed. Sandro Carocci (Rome: Istituto Storico Italiano per il Medio Evo, 2003), 3–78.
 - 17 A detailed study of the Conti family is Dykmans, "D'Innocent III à Boniface VIII." For Boniface VIII, see Agostino Paravicini Bagliani, *Bonifacio VIII* (Turin: Einaudi, 2003).
 - 18 For Gregory IX, see Capitani, "Gregorio IX," 59, 166–78.
 - 19 On the palace, see Maria Teresa Gigliozzi, *I palazzi del papa: Architettura e ideologia: il Duecento* (Rome: Viella, 2003), 9–43; Voci, "I palazzi papali del Lazio," 211–49, esp. 217–20; Le Pogam, *De la "Cité de Dieu" au "Palais du Pape,"* 171–203.
 - 20 For the inscriptions with English translations, see Smith, "Anagni," 6.
 - 21 Tomei, "Gli affreschi: una lettura," 39–48.
 - 22 Urciuoli, "La cattedrale di Anagni."
 - 23 The staircase was demolished in 1839 but can be seen in Giovanni Antonio Dosò's sixteenth-century panorama drawing of Anagni, in a plate from Alessandro de Magistris's 1749 history of Anagni; and in Constant Bourgeois's 1817 lithograph captioned "Entree de l'Eglise principale d'Anagni" (British Museum, 1941.0918.69.13).
 - 24 For the pictorial decorations of the Beckett oratory, see Herbert L. Kessler, "The Oratory of Thomas Becket in Anagni," in *Old St. Peter and Church Decoration in Medieval Italy* (Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 2002), 141–57; Francesca Romana Moretti, "La parabola delle dieci vergini nell'Oratorio di S. Tommaso Becket ad Anagni: rappresentazione pittorica di un drama medievale," in *Il Molise medievale: archeologia e arte* (Borgo San Lorenzo: All'Insegna del Giglio, 2010), 249–59; Claudia Quattrocchi, *Un martire inglese alla curia di Roma. L'oratorio di San Thomas Becket di Canterbury nella cattedrale di Anagni* (Rome: Campisano Editore, 2017).
 - 25 On the notion of intervisuality in medieval art, see Michael Camille, "The Gothic Sign and the Surplus: The Kiss on the Cathedral," *Yale French Studies. Special Issue: Contexts: Style and Values in Medieval Art and Literature* (1991): 151–70; Robert S. Nelson, "The Great Church and the Chora: Intervisuality in Fourteenth-Century Constantinople," *Byzantine and Modern Greek Studies* 23 (1999): 67–101; Madeline H. Caviness, *Visualizing Women in the Middle Ages: Sight, Spectacle, and Scopic Economy* (University Park: Pennsylvania State University Press, 2001).
 - 26 For the Magnus narratives, see Bagnoli, "A Pilgrim's Prayer for Salvation."
 - 27 For the most detailed study of these typological connections, see Smith, "Anagni," 33–6.
 - 28 Fundamental on this for medieval art history is Caviness, "Images of Divine Order and the Third Mode of Seeing."
 - 29 On visual exegesis as it pertains to medieval apocalypse imagery, see Natasha O'Hear, *Contrasting Images of the Book of Revelation in Late Medieval and Early Modern Art: A Case Study in Visual Exegesis* (Oxford: Oxford University Press, 2011); Richard K. Emmerson,

- Apocalypse Illuminated: The Visual Exegesis of Revelation in Medieval Illustrated Manuscripts* (University Park: Pennsylvania State University Press, 2018); Alison Locke Perchuk, *The Medieval Monastery of Saint Elijah: A History in Paint and Stone* (Turnhout: Brepols, 2021).
- 30 On thinking as embodied and intrinsically bound to the world of material things, see Lambros Malafouris, *How Things Shape the Mind: A Theory of Material Engagement* (Cambridge, MA: MIT Press, 2013).
- 31 Demus, *Byzantine Mosaic Decoration*; Sandström, *Levels of Unreality*; Grau, *Virtual Art*, 24–37; Bergmeier, “Dominanz der Imagination,” 37–48.
- 32 Examples include Smith, “Anagni,” 38: “the subject matter is very varied and the way in which the scenes are arranged is not entirely logical.” Guglielmo Matthiae, *Pittura romana del medioevo. Volume 2: Secoli XI–XIV, aggiornamento scientifico e bibliografia di Francesco Gandolfo* (Rome: Palombi, 1988), 121: “while the iconographic matter of the vast cycle is exceedingly complex, one could not say that it possesses a true unity.” Boskovits, “Gli affreschi,” 11–12: “One would be justified in asking oneself if the incredible archaism of the First Master of Anagni, the loving care in his finishing of the ornamental elements (which are in open contrast to the indifference and haste of the Second and Third Masters), the diversity in his figurative and ornamental repertoire as well as the color palette of his frescoes vis-à-vis those of the other two, does not imply a different moment of execution. And, indeed, many facts corroborate this hypothesis, of which not the least is the iconographic incongruence of the interventions of the Second and Third Masters, which seem to break away from the original program followed by the first painter.”
- 33 As such, the vaults mobilize a form of pilgrimage of spatial beholding perhaps comparable to the multisensorial movements elicited by Matthew Paris’s itinerary maps as brilliantly described by Daniel Connolly in “Imagined Pilgrimage in the Itinerary Maps of Matthew Paris,” *Art Bulletin* 81:4 (1999): 598–622.
- 34 For a contemporaneous encyclopedic work that presents itself as a medium for emulating divine omniscience, take, for example, Gregory of Montesacro’s monumental encyclopedic poem titled *On the Deification of Men* (*De hominum deificatione*). The work was dedicated to Cardinal Thomas of Capua, the papal notary to Pope Gregory IX. See Bernhard Pabst, *Gregor von Montesacro und die geistige Kultur Südtaliens unter Friedrich II* (Stuttgart: Steiner, 2002).
- 35 The “Platonic” thematics of these images were first studied by Léon Pressouyre in “Le cosmos platonicien de la cathédrale d’Anagni,” *Mélanges d’Archéologie et d’Histoire* 78 (1966): 551–93. For a more recent assessment through a “Boethian” lens, see Cappelletti, *Gli affreschi della cripta anagnina*, 43–79.
- 36 On the microcosmism of the twelfth century, see Chenu, *Nature, Man, and Society*, esp. 1–48; Marie-Thérèse D’Alverny, “L’Homme comme symbole, le microcosme,” in *Simboli e Simbologia nell’alto Medioevo* (Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1976), 123–83.
- 37 For the iconographic tradition, see Martina Bagnoli, “Le fonti e documenti per l’indagine iconografica,” in *Un universo di simboli: gli affreschi della cripta nella cattedrale di Anagni*, ed. Gioacchino Giammaria (Rome: Viella, 2001), 71–86.
- 38 According to the diagram, fire possesses acuteness, subtlety, and mobility; air possesses subtlety, mobility, and obtuseness; water possesses mobility, obtuseness, and corpulence; earth possesses obtuseness, corpulence, and immobility.
- 39 Harry Bober, “In Principio: Creation before Time,” in *De Artibus Opuscula XL: Essays in Honor of Erwin Panofsky*, ed. Millard Meiss (New York: New York University Press, 1961), 1:13–28; Eric Ramirez-Weaver, “‘So That You Can Understand This Better’: Art, Science, and Cosmology for Courtiers in William of Conches’ *Dragmaticon Philosophiae*,” in *Diagramm und Text*, eds. Eckart Conrad Lutz, Vera Jerjen, and Christine Putzo (Wiesbaden: Reichert Verlag, 2014), 319–48.
- 40 Plato, *Timaeus and Critias*, trans. Robin Waterfield (Oxford and New York: Oxford University Press, 2008), 20.

- 41 *Ibid.*, 20.
- 42 Conrad Rudolph, *The Mystic Ark: Hugh of Saint Victor, Art, and Thought in the Twelfth Century* (New York: Cambridge University Press, 2014), 36–7.
- 43 Dronke, “Thierry of Chartres,” 358–85, esp. 376–82; David C. Lindberg, *The Beginnings of Western Science* (Chicago: University of Chicago Press, 2007), 210.
- 44 Conrad Rudolph, “In the Beginning: Theories and Images of Creation in Northern Europe in the Twelfth Century,” *Art History* 22:1 (1999): 3–55.
- 45 This argument is based on *ibid.*, 34–6.
- 46 A comparable interest in highlighting the conceptual harmony between Genesis and *Timaeus* by pictorial means had already been seen in the frontispiece of the eleventh-century Saint Hubert Bible, where the elements personified as energetic jugglers were accompanied by the platonic number formulae. See Bober, “In Principio: Creation before Time,” 13–28; Ittai Weinryb, “Living Matter: Materiality, Maker, and Ornament in the Middle Ages,” *Gesta* 52:2 (2013): 113–32; Ittai Weinryb, *The Bronze Object in the Middle Ages* (Cambridge: Cambridge University Press, 2016), 63–70.
- 47 On the term “desacralization” as it pertains to twelfth- and thirteenth-century philosophy, see Chenu, *Nature, Man, and Society*, 10–15.
- 48 This point was made by Smith, who compared the cosmological cycle in Anagni to the twelfth-century Genesis imagery lining the nave of the Cathedral of Monreale. See Smith, “Anagni,” 9, 13.
- 49 For the theme of creation as already built into the concept of the microcosm, see John D. North, “Macrocosm, Microcosm, and Analogy,” in *Imagination in the Later Middle Ages and Early Modern Times*, eds. Lodi Nauta and Detlev Pätzold (Leuven and Dudley, MA: Peeters, 2004), 133–51. North points out: “to insist that the microcosm is a reflection of the macrocosm is to insist that man with whom God finished his work of creation is a living example of that creation.” North, “Macrocosm, Microcosm, and Analogy,” 139.
- 50 For a discussion of ornament in the crypt, see Martina Bagnoli, “‘Ut Domus Tali Ornetur Decore’: Metamorphosis of Ornamental Motifs in Anagni and Rome,” in *Roma Felix: Formation and Reflections of Medieval Rome*, eds. Éamonn Ó Carragain and Carol Neuman de Vegar (Aldershot: Ashgate, 2007), 207–33.
- 51 Andberg, “Le paysage marin dans le crypte de la cathédrale d’Anagni.”
- 52 Andberg based his interpretation on the exegetical writings of Hugh of Saint Victor, Herrad of Landsberg, and Abelard. On the waters of creation more generally, see Helen Rodnite Lemay, “Science and Theology at Chartres: The Case of the Supracelestial Waters,” *British Journal for the History of Science* 10:3 (1977): 226–36.
- 53 For example, Augustine, *Confessions*, Book XIII, chapters II and XXI; Augustine, *On Genesis against the Manichees*, Book I, 5–7. See also the reference entry “Chaos,” in *Encyclopedia of the Bible and Its Reception. Vol 4*, eds. Constance M. Furey et al. (Berlin and Boston, MA: Walter de Gruyter, 2012), 1158–68.
- 54 Weinryb, *The Bronze Object*, 64–8.
- 55 On this, see the formidable analysis in Weinryb, “Living Matter,” esp. 123–8. For a broader perspective, see Peter Dronke, *The Spell of Calcidius: Platonic Concepts and Images in the Medieval West* (Impruneta: Sismel, 2008).
- 56 Bynum, *Christian Materiality*, 232–3; Anna Somfai, “The Eleventh-Century Shift in the Reception of Plato’s *Timaeus* and Calcidius’s Commentary,” *Journal of the Warburg and Courtauld Institutes* 65 (2002): 1–21. On artistic creation vis-à-vis divine creation, see Weinryb, “Living Matter,” 113–32; Beate Fricke, “Artifex and Opifex – The Medieval Artist,” in *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*, ed. Conrad Rudolph (Hoboken: Wiley-Blackwell, 2019), 45–70; Kessler, *Experiencing Medieval Art*, 31–90.
- 57 A similar evocation of theophany by means of natural light is seen in the mosaic composition above the main altar in Santa Prassede’s Zeno Chapel, where figures of John the Baptist and the Virgin flank a window to suggest a *deesis* (“supplication”) motif. See

- Marianne W. Asmussen, "The Chapel of S. Zeno in S. Prassede in Rome," *Analecta Romana Instituti Danici* 15 (1986): 67–87, 74.
- 58 Revelation 21:1: "Then I saw a new heaven and a new earth, for the first heaven and the first earth had passed away, and the sea was no more." Revelation 21:23–25: "And the city has no need of sun or moon to shine on it, for the glory of God gives it light, and its lamp is the Lamb. By its light will the nations walk, and the kings of the earth will bring their glory into it, and its gates will never be shut by day – and there will be no night there."
- 59 Revelation 6:12–14: "When he opened the sixth seal, I looked, and behold, there was a great earthquake, and the sun became black as sackcloth, the full moon became like blood, and the stars of the sky fell to the earth as the fig tree sheds its winter fruit when shaken by a gale. The sky vanished like a scroll that is being rolled up, and every mountain and island was removed from its place."
- 60 On the microcosm analogy and its visual and verbal representation, see George Perrier Conger, *Theories of Macrocosms and Microcosms in the History of Philosophy* (New York: Columbia University Press, 1922); Fritz Saxl, "Macrocosm and Microcosm in Medieval Pictures," in *Lectures* (London: Warburg Institute, 1957) I:58–72; Leonard Barkan, *Nature's Work of Art: The Human Body as Image of the World* (New Haven, CT and London: Yale University Press, 1975); D'Alverny, "L'Homme comme symbole," 123–95; Elizabeth Sears, *The Ages of Man: Medieval Interpretations of the Life Cycle* (Princeton, NJ: Princeton University Press, 1986), 9–37.
- 61 Youth: "PVERITIA, SANGVIS, AER CALIDVS (ET) HV(M)IDVS, VER HVMIDVM ET CALIDVM." Adolescence: "ADOL(E)S(C)EN(T)IA, COLER(A) RVBRA, IGNIS CALIDVS ET SICCVS, ESTAS CALIDA ET SICCA." Maturity: "IVVENTVS, MELANCOLIA, TERRA FRIGIDA ET SICCA, AV(T)VMNVS FRIGIDVS ET SICCVS." Old age: "SENECTVS, FLEVMA, AQUA FRIGIDA ET HVMIDA, HIEMS FRIGIDA ET HVMIDA."
- 62 This is according to Isidore of Seville, whose *Etymologies* defines body (*corpus*) as that which perishes through corruption (*corruptum*). See Bynum, *Christian Materiality*, 232.
- 63 Nancy G. Sirasi, *History, Medicine, and the Traditions of Renaissance Learning* (Ann Arbor: University of Michigan Press, 2007), 86–7. In the corpus of genuine Hippocratic writings, comments related to the effects of astronomical phenomena on health are limited to the discussion of meteorological conditions in *Airs, Waters, and Places*. See Hippocrates, *Ancient Medicine. Airs, Waters, Places. Epidemics 1 and 3. The Oath. Precepts. Nutriment*, trans. W. H. S. Jones, Loeb Classical Library 147 (Cambridge, MA: Harvard University Press, 1923), 65–137; see also Elizabeth M. Craik, *The "Hippocratic" Corpus: Content and Context* (London and New York: Routledge, 2015), 7–12.
- 64 Pearl Kibre, "Astronomia or Astrologia Ypocratis," *Studia Copernicana* 16 (1977): 133–56. On the reception and use of the treatise by twelfth- and thirteenth-century medical doctors, see Roger French, "Astrology in Medical Practice," in *Practical Medicine from Salerno to the Black Death*, ed. Luis García-Ballester (Cambridge: Cambridge University Press, 1994), 30–59.
- 65 The maxim appears in different versions in the treatise's incipit. In the Latin rendering of papal court translator William of Moerbeke, it reads: "Sapientissimus Ypocras [et] omnium medicorum peritissimus ait: cuiusmodi medicus est qui astronomiam ignorat. Nemo quidem in manus illius se committere debet quia imperfectus est et cecus et ideo non merito talis medicus reputatur." Quoted from Kibre, "Astronomia'," 141–2.
- 66 Glen M. Cooper, "Galen and Astrology: A Mésalliance?," *Early Science and Medicine* 16:2 (2011): 120–46. For the reception of Galen in the Middle Ages more broadly, see Nancy Sirasi, *Taddeo Alderotti and His Pupils* (Princeton, NJ: Princeton University Press, 1981), 65–6, 99–107; the relevant essays in Petros Bouras-Vallianatos and Barbara Zipsper, *Brill's Companion to the Reception of Galen* (Leiden: Brill, 2019).
- 67 Cornelius O'Boyle, *Medieval Prognosis and Astrology: A Working Edition of the Aggregationes de crisi et ceticis diebus* (Cambridge: Wellcome Unit for the History of Medicine, 1991);

- Pseudo-Galen, "Summary on Crises and Critical Days," in *Medieval Medicine: A Reader*, ed. and trans. Faith Wallis (Toronto: University of Toronto Press, 2010), 318–23. For the Pseudo-Galenic *Prognostication of Disease by Astrology*, which is closely related to the Pseudo-Hippocratic *Astrologia Ypocratis*, see Kibre, "'Astronomia,'" 135; Stefan Weinstock, "The Author of Ps.-Galen's *Prognostica de Decubitu*," *Classical Quarterly* 42:1–2 (1948): 41–3.
- 68 Similarly, astrological treatises would frequently include discussions of medicine, as did Abu Ma'shar's *Great Introduction to Astrology*. See Roger French, "Foretelling the Future: Arabic Astrology and English Medicine in the Late Twelfth Century," *Isis* 87:3 (1996): 453–80, esp. 455–7.
- 69 On the melothesian principle, see Wolfgang Hübner, "Eine unbeachtete zodiakale Melothesie bei Vettius Valens," *Rheinisches Museum für Philologie* 120:3–4 (1977): 247–54; Charles Clark, "The Zodiac Man in Medieval Medical Astrology," *Journal of the Rocky Mountain Medieval and Renaissance Association* 3 (1982): 13–38, at 24. On the consolidation of melothesian theory and Galen's system of the four humors, elements, and qualities, see French "Astrology in Medical Practice," 37–43.
- 70 Quoted from Rutkin, *Sapientia Astrologica*, 165.
- 71 Pseudo-Galen, "Summary on Crises and Critical Days," 318–23; O'Boyle, *Medieval Prognosis and Astrology*, 64–72.
- 72 Pseudo-Galen, "Summary on Crises and Critical Days," 322–3.
- 73 Clark, "The Zodiac Man," 13–38; Harry Bober, "The Zodiacal Miniature of the Très Riches Heures of the Duke of Berry: Its Sources and Meaning," *Journal of the Warburg and Courtauld Institutes* 11 (1948): 1–34; Dieter Blume, "Körper und Kosmos im Mittelalter," in *Bild und Körper im Mittelalter*, eds. Kristin Marek and Raphaële Preisinger (Paderborn: Fink, 2006), 225–41.
- 74 Saxl, "Macrocosm and Microcosm," 58–72.
- 75 For illustrations, see Saxl, *Lectures*, 2, plates 34–42.
- 76 Clark, "The Zodiac Man," 33–4; Hilary M. Carey, "What Is the Folded Almanac? The Form and Function of a Key Manuscript Source for Astro-Medical Practice in Later Medieval England," *Social History of Medicine* 16:3 (2003): 481–509. For Abu Ma'shar's treatise and its Latin translation history, see Lemay, *Abu Ma'shar and Latin Aristotelianism in the Twelfth Century*.
- 77 For a lucid discussion of the relationship between potential images and the interpretive and projective aspects of human perception, see Dario Gamboni, *Potential Images: Ambiguity and Indeterminacy in Modern Art* (London: Reaktion Books, 2004), esp. 9–41.
- 78 On the term *complexion* and complexion theory in available Galenic and Hippocratic writings, see Nancy Siraisi, *Medieval and Early Renaissance Medicine* (Chicago: University of Chicago Press, 1990), 101–4; Danielle Jacquart, "De crasis à complexio: Note sur le vocabulaire du tempérament en latin medieval," in *La science médicale occidentale entre deux renaissances (XIIe s.–XVe s.)* (Aldershot: Variorum, 1997), 71–6; Joel Kaye, *A History of Balance, 1250–1375: The Emergence of a New Model of Equilibrium and Its Impact on Thought* (Cambridge: Cambridge University Press, 2014), 128–82. The epitaph begins on the lunette's arched border and continues on the inner rim of the arch separating the microcosm and planetary vaults. It reads: "DE QVO PLVS ET INEST COMPLEXIO DICITVR HVIVS ETAS VULTVS HVMO(R) MVTANTVR TEMPOR(E) CUIVS" (Age, appearance, and mood of the one who has a certain constitution are transformed in the time that is proper to it). My translation follows that of Cappelletti, *Gli affreschi della cripta anagnina*, 71.
- 79 For an overview, see Shulasmith Shahar, "The Old Body in Medieval Culture," in *Framing Medieval Bodies*, eds. Sarah Kay and Miri Rubin (Manchester and New York: Manchester University Press 1994), 160–86.
- 80 Lotario dei Segni (Pope Innocent III), *De miseria condicionis humane*, ed. Robert E. Lewis (Athens: University of Georgia Press, 1978), 106–8.
- 81 *Ibid.*, 106.

- 82 Paravicini Bagliani, *The Pope's Body*, 3–57. My discussion of these developments draws heavily on the work of Paravicini Bagliani, especially *The Pope's Body* and the essays in *Medicina e scienze della natura*.
- 83 This *sede vacante* lasted until June 1243, when Innocent IV was elected in Anagni. On the tumultuous circumstances of the 1241 conclave and the subsequent vacancy, see Thomas Curtis Van Cleve, *The Emperor Frederick II of Hohenstaufen, Immutator Mundi* (Oxford: Clarendon Press, 1972), 456–62.
- 84 Migne, ed., *Patrologiae Cursus Completus*, vol. 145, *S. Petri Damiani, Opera omnia*, col. 471–80. Damian's treatise was written for Alexander II (r. 1061–73) and devoted specifically to the problem of “why the bishop of the Apostolic See never lived very long, but died in a short space of time.” For a discussion of the letter with further references, see Paravicini Bagliani, *The Pope's Body*, 5–11. For the English translation of Damian's letter, see Peter Damian, *Letters 91–120*, trans. Owen J. Blum, in *Fathers of the Church Medieval Continuation*, vol. 5 (Washington, DC: Catholic University of America, 1998), 195–206.
- 85 Paravicini Bagliani, *The Pope's Body*, 162.
- 86 *Ibid.*, 29–39; Bernhard Schimmelpennig, “Papal Coronations in Avignon,” in *Coronations: Medieval and Early Modern Monarchic Ritual*, ed. János M. Bak (Berkeley: University of California Press, 1990), 179–96.
- 87 Agostino Paravicini Bagliani, “Medici e ricette mediche alla corte papale nel Duecento,” in *Medicina e scienze della natura*, 1–52; Paravicini Bagliani, “Il mito della *prolongatio vitae*,” 281–326.
- 88 Paravicini Bagliani, “Il mito della *prolongatio vitae*,” 281–326. For a broad view of theories of prolongevity, see Gerald J. Gruman, “A History of Ideas about the Prolongation of Life: The Evolution of Prolongevity Hypotheses to 1800,” *Transactions of the American Philosophical Society* 56:9 (1966): 1–102.
- 89 For the Latin text, see *De retardatione accidentium senectutis*, ed. A. G. Little and E. Withington (Farnborough: Gregg, 1966).
- 90 The author appears to have written two slightly different versions. The first was written for Innocent IV, while a second somewhat abbreviated version was made for the Emperor Frederick II (1194–1250).
- 91 On the relationship between *De retardatione* and the *Secretum Secretorum*, see Williams, *The Secret of Secrets*, 125–8.
- 92 Agostino Paravicini Bagliani, “Ruggero Bacone e l'alchimia di lunga vita. Riflessioni sui testi,” in *Alchimia e medicina nel Medioevo*, eds. Chiara Crisciani and Agostino Paravicini Bagliani (Florence: Edizioni del Galluzzi, 2003), 33–54.
- 93 On the epigraph, see [note 78](#).
- 94 Paravicini Bagliani, *The Pope's Body*, 206–7; William R. Newman, “An Overview of Roger Bacon's Alchemy,” in *Roger Bacon and the Sciences*, ed. Jeremiah Hackett (Leiden: Brill, 1997), 317–36.
- 95 Newman, “An Overview of Roger Bacon's Alchemy,” esp. 323–8.
- 96 Bacon quoted in Wallis, ed., *Medieval Medicine*, 329.
- 97 Lotario dei Segni (Pope Innocent III), *De miseria condicionis humane*, 106. Lothario is paraphrasing Job 7:6.
- 98 On martyrdom and typology, see, for example, Elizabeth A. Castelli, *Martyrdom and Memory: Early Christian Culture Making* (New York: University of Columbia Press, 2004).
- 99 Klara Butting, “‘Abel steh Auf!’ – Die Geschichte von Kain und Abel – und Schet (Gen. 4.1–26),” *Bibel und Kirche* 58 (2003): 16–19.
- 100 On the lamp metaphor in Aristotle, Galen, and Avicenna, see Niebyl, “Old Age, Fever, and the Lamp Metaphor,” 351–68.
- 101 *Ibid.*, 351–68.
- 102 For a discussion of the motif, see Draghi, *Gli affreschi*, 111–13.
- 103 As an attribute of Clotho, one of the three weavers of human fate, the distaff occurred frequently in Roman funerary imagery, as in a third-century sarcophagus from Arles, now

- in the Louvre (accession no. LL 309), depicting Prometheus creating humankind from mud. In medieval poetry and philosophical writings, including the work of Alan of Lille and Bernardus Silvestris, the three Fates came to stand for death. For the distaff as a motif of femininity and punishment, see Malcolm Jones, "Folklore Motifs in Late Medieval Art II: Sexist Satire and Popular Punishments," *Folklore* 101:1 (1990): 69–87, at 71–2.
- 104 Gail McMurray Gibson, "The Thread of Life in the Hand of the Virgin," in *Equally in God's Image: Women in the Middle Ages*, eds. Julia Bolton Holloway, Joan Bechtold, and Constance S. Wright (New York: Peter Lang, 1990), 46–54.
- 105 Medieval calendar cycles and Genesis were often linked thematically on the basis of their shared focus on agricultural work. Genesis, as Chiara Frugoni points out, could be understood as the story of how human time came to be structured by the rhythms of agricultural labor. See Chiara Frugoni, "Il ciclo dei mesi nella 'Porta della Pescheria' del Duomo di Modena," in *La Porta della Pescheria nel Duomo di Modena*, eds. Chiara Frugoni, Monica Chiellini Nari, and Cristina Acidini Luchinat (Modena: Franco Cosimo Panini, 1991), 13–31.
- 106 Conversely, on temporal existence as part of humanity's punishment after the original sin, see Aavitsland, *Imagining the Human Condition*, 95.
- 107 For Eve and the distaff see, for example, Vigi and Sassu, eds., *Il Maestro dei Mesi*, plate 25.
- 108 Here, I draw on Joseph Leo Koerner's lucid discussion of the meaning of Abel's death in "The Mortification of the Image," esp. 52–4.
- 109 Jensen, "Joh. Chrysostomus," 4:426–8.
- 110 William Lane Craig, *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez* (Leiden and New York: Brill, 1988), 1–126.
- 111 See the superb discussion of Boethius's usage of the term in Daniel Heller-Roazen, *Fortune's Faces: The Roman de la Rose and the Poetics of Contingency* (Baltimore: Johns Hopkins University Press, 2003), 11–28.
- 112 Boethius, *Theological Tractates: The Consolation of Philosophy*, trans. H. F. Stewart, E. K. Rand, and S. J. Tester, Loeb Classical Library 74 (Cambridge, MA: Harvard University Press, 1973), 364–5, 426–7.
- 113 Thomas Aquinas, *Summa Theologica*, trans. Fathers of the English Dominican Province (New York: Benziger Brothers, 1947), I, 14, 13, Reply Obj. 2.
- 114 *Ibid.*, I, 14, 13, Reply Obj. 2.
- 115 The bibliography on medieval astrology is vast. Recent overviews include Jean-Patrice Boudet, *Entre science et nigromance: astrologie, divination et magie dans l'occident médiéval (XII–XVe siècle)* (Paris: Publications de la Sorbonne, 2006); Hilary M. Carey, "Astrology in the Middle Ages," *History Compass* 8:8 (2010): 888–902; Rutkin, *Sapientia Astrologica*.
- 116 Hilary M. Carey, "Judicial Astrology in Theory and Practice in Later Medieval Europe," *Studies in History and Philosophy of Biological and Biomedical Sciences* 41 (2010): 90–8; Boudet, "Astrology," 62–3.
- 117 Quoted from Williams, *The Secret of Secrets*, 12.
- 118 Rutkin, *Sapientia Astrologica*, 156.
- 119 Paola Zambelli, *The Speculum Astronomiae and Its Enigma: Astrology, Theology and Science in Albertus Magnus and His Contemporaries* (London: Kluwer Academic Publishers, 1992); Agostino Paravicini Bagliani, *Le Speculum Astronomiae, une énigme?* (Florence: Sismel and Edizioni del Galluzzo, 2001).
- 120 The *Speculum astronomiae* has been attributed to several different authors, including Richard of Fournival, Roger Bacon, and Albertus Magnus. Paola Zambelli argued that the treatise should be attributed to Albertus Magnus in collaboration with the papal court astrologer Campanus of Novara. In his survey of surviving manuscripts of the treatise, Paravicini Bagliani demonstrated that no text prior to the mid-fourteenth century attributes the *Speculum* to Albertus Magnus. He also argued that the only textual element within the treatise itself to refer to its author could only be a reference to Campanus of Novara, who should consequently be considered its author. See Zambelli, *The Speculum Astronomiae*, 121–7; Paravicini Bagliani, *Le Speculum Astronomiae*; Rutkin, *Sapientia Astrologica*, 5–10.

- 121 Zambelli, *The Speculum Astronomiae*, 111.
- 122 On this, see Smoller, *History, Prophecy, and the Stars*, 25–9.
- 123 Other fragments in the lower border include “HI[...], [...]SVM” and “VMI[...].” Ptolemy is the standard representative of astrology in the medieval iconographic tradition. The close resemblance between the Anagni astrologers and the author portraits of Abu Ma’shar and Georgius Fendulus in the contemporaneous *Liber astrologiae* (Paris, Bibliothèque nationale de France, Ms. lat. 7330), created at the court of Frederick II, is suggestive. The portrait of Georgius Fendulus appears on fol. 1r; that of Abu Ma’shar is on fol. 41v.
- 124 My reconstruction of the last segment as “(EVEN)TA FVTVRI” follows that of Toesca, *Gli affreschi*, 123, who studied the frescoes around 1900. However, see also Cappelletti, *Gli affreschi della cripta anagnina*, 51–4, 269.
- 125 My argument here follows that of Rutkin, *Sapientia Astrologica*, 5–10, 147–67.
- 126 *Ibid.*, 159–64.
- 127 *Ibid.*, 163.
- 128 Thomas Aquinas makes a comparable argument in *Summa Theologica: Part II-II (Secunda Secundae)*, trans. Fathers of the English Dominican Province (New York: Benziger Brothers, 1947), Q. 95.
- 129 Rutkin, *Sapientia Astrologica*, 164–5.
- 130 The question of the zodiac’s sequence is analyzed in Patrick McGurk, “Germanici Caesaris Aratea cum scholiis, a New Illustrated Witness from Wales,” *National Library of Wales Journal* 18 (1973): 97–213, esp. 200–1.
- 131 As Bagnoli points out, the Walters diagram and the Anagni vault both appear as “frontis-pieces” to larger cycles of images. Martina Bagnoli, “The Syzygy at Anagni. Measuring the Gap between Concept and Execution in Medieval Wall Painting,” *Zeitschrift für Kunstgeschichte* 72 (2009): 313–28.

SIX

CONCLUSION

THE PRECEDING CHAPTERS HAVE ARGUED THAT THE ANAGNI AND SANTI Quattro Coronati frescoes are products of the significant cultural and intellectual expansion that occurred in Rome and the papal state during the middle decades of the thirteenth century. In their own distinct ways, the two monuments brought together worldly and religious knowledge within stylistically uniform and spatially immersive pictorial programs. As assemblages of varied forms of learning, the two mural cycles invited reflective viewing, and in many cases required viewers to make interpretive connections between spatially distant images. Such dynamic interaction between educated viewers and architecturally embedded images could generate combinatory and associative interpretations that granted individual motifs new levels of meaning based on their relation to other images within the cycle. In this way, each monument functioned not only as a monumental image of the world's knowledge but also as an interactive tool for philosophical thinking.

In an overarching sense, both mural cycles treated in this book can be seen as physically constructed models of the cosmos. The medieval church had always been conceived as a liminal space that brought the world of humans into contact with that of the divine. The fresco cycles at Santi Quattro Coronati and Anagni approached this basic concept from a new perspective by examining the epistemic tools that enabled people to have knowledge of the world as well as of the spiritual reality that lay behind it. Each mural cycle achieved this by placing two divergent viewpoints in conversation with one

another. The Anagni crypt allowed viewers to experience the tension between an embodied, timebound view of the world and the wished-for, but unachievable, panoptic view. In a comparable manner, the great hall at Santi Quattro Coronati juxtaposed the notion of a human view on the cosmos with that of an external, or exegetic, view onto the world. The exegetic viewpoint was most explicitly articulated in the cycle of virtues and vices in the north bay, where allegorical figures and historical characters from different historical periods were combined to show sacred history as if from a vantage point outside of human time. The south bay frescoes, by contrast, with their images of the seasons and the months of the year, portrayed the quotidian experience of time's passing as if from a vantage located within time itself.

Both fresco cycles, accordingly, drew attention to the perspectival conditions that delimited human knowledge by placing these conditions in conversation with their imagined opposite. In both monuments, moreover, the scope of human knowledge was closely correlated with the inescapable temporality and embodiment of human life; the condition of living within time and the body limits the kinds of things that humans might have knowledge of. This emphasis on temporality and embodiment, I suggest, could have invoked medieval philosophical thinking around the differences between human and divine knowledge. As we saw in [Chapter 5](#), medieval philosophers such as Boethius and Thomas Aquinas, among others, had employed perspectival and temporal metaphors to describe the perfect knowledge of God vis-à-vis the imperfect knowledge of humans. Since the human vantage was temporally situated, humans could acquire knowledge only in a sequential manner. The divine vantage, by contrast, was situated beyond time and could therefore have knowledge of all things – past, present, and future – at once. According to the argument presented in this book, the fresco cycles at Santi Quattro Coronati and Anagni encouraged viewers to experience the conditional parameters – i.e., temporal existence and embodiment – that delimited human knowledge. Through factors such as scale and the spatial arrangement of pictorial motifs, each monument produced an incremental viewing experience that was contingent on bodily movement as well as cognitive processing of visual images. In each monument, viewers could experience the tensions between knowing and not knowing, and between seeing and not seeing, as aspects of their own embodiment and temporal existence.

Yet, each monument also posited the aggregated learning of human history – the liberal arts, philosophy, cosmology, astro-medicine, and biblical exegesis – as potential means for bridging the gap between human and divine understanding. At Anagni, predictive astrology and astrologically informed medicine were presented as compensatory tools against the corruptive effects of time on the human body and intellect. In the great hall at Santi Quattro

Coronati, the images of temporal measurement and liberal disciplines (in the south bay) and the representations of biblical hermeneutics (in the north bay) invoked the intellectual tools through which humans might assume different interpretive perspectives on sacred history and on temporality as such. The encouragement of such deep speculation around the scope and limits of human knowledge was central to the fresco cycles' philosophical function.

The philosophical ambition of these fresco cycles establishes them as precursors to a series of large-scale pictorial programs produced on the Italian peninsula from the 1270s onward. These works were executed in both sculpture and mural painting and were tailored to distinct cultural settings that ranged from public squares and communal halls to monasteries, ecclesiastical chapels, and episcopal palaces. In some works, encyclopedic motifs were incorporated into pictorial schemes that elucidated aspects of communal identity; in others, these same kinds of iconographies sought to define the intellectual character of institutions. An example of the latter is Andrea di Bonaiuto's large fresco adorning the west wall of the chapterhouse at Santa Maria Novella in Florence, which promoted the self-professed learnedness of the Dominican order as embodied in its most famous intellectual, Thomas Aquinas (Figure 6.1).¹ In this well-known fresco, images of the liberal arts, the planets, the virtues, the theological sciences, Old and New Testament characters, and ancient intellectuals are organized around the enthroned figure of Thomas Aquinas. The encyclopedic allegories are meant to portray the breadth and



6.1. Andrea di Bonaiuto, Triumph of Saint Thomas Aquinas, ca. 1366–8, chapterhouse, Santa Maria Novella, Florence. Photograph: Peter Barritt / Alamy Stock Photo.

depth of Aquinas's intellectual acumen and writerly output. Seated in the manner of an erudite ruler and judge, the mendicant philosopher functions as a gravitational point around which worldly knowledge and religious knowledge are brought together.

The Fontana Maggiore (ca. 1277–8), a monumental fountain adorning the principal public square in Perugia, exemplifies the use of encyclopedic pictorial motifs in the artistic fashioning of communal identity (Figure 6.2).² The fountain features two polygonal basins placed one on top of the other, the lower of which bears a series of reliefs depicting the labors of the months, the signs of the zodiac, the liberal arts, and scenes from the Old Testament and Ancient Roman mythology. This encyclopedic scheme forms a kind of universalizing substructure for the more context-specific images on the upper basin, which include an array of standing figures, several of which represent personages associated with Perugia's origin myths as well as its contemporary governance. The sculptural program thus portrays knowledge and learnedness (on the lower basin) as the foundation upon which Perugia's storied past, present-day economic prosperity, and principles of good government (on the upper basin) are based. The Perugia fountain can be productively compared with the series of marble reliefs adorning the base of the bell tower adjacent to Florence Cathedral (ca. 1340–60) (Figure 6.3).³ Attributed to Andrea Pisano, the reliefs are installed as two horizontal bands that encompass all four sides of the campanile's lower zone. The upper band features twenty-eight diamond-



6.2. Fontana Maggiore, ca. 1278, Perugia. Photograph: travelbild.com / Alamy Stock Photo.



6.3. View of west side of campanile showing series of reliefs designed by Andrea Pisano, ca. 1340–60, Santa Maria del Fiore, Florence. Photograph: Author.

shaped panels depicting the seven planets, the seven virtues, the seven liberal arts, and the seven sacraments. The twenty-six hexagonal panels that comprise the lower band feature scenes from Genesis along with representations of the mechanical arts and various other human occupations, activities, and inventions.

Along with the Fontana Maggiore, the Florentine campanile is further related to two sets of Venetian sculptural decorations, located around the central doorway of San Marco (ca. 1220–60) and along the portico of the adjacent Doge's Palace (ca. 1342–8). The two archivolt around San Marco's central portal display intricately carved images of the months, the signs of the zodiac, the virtues, and human occupations. These thirteenth-century sculptures were complemented in the fourteenth century by an extensive series of thirty-seven carved capitals on the colonnades extending along the east and south façades of the Palazzo Ducale (Figure 6.4). The capitals feature a diverse array of pictorial motifs, ranging from representations of the virtues, vices, and deadly sins to images of the months, the liberal and mechanical arts, the human ages, and the peoples of the world.⁴



6.4. Sculpted capitals in portico, ca. 1342–8, Doge's Palace, Venice. Photograph: Courtesy of Ian Coulling.

Each of these diverse sculptural decorations presents a summary of worldly and religious learning interspersed with motifs specific to the context in which the cycle appears. In place of the images that reference Perugia's communal identity on the Fontana Maggiore, the Venetian and Florentine monuments highlight the skilled trades and mercantile prosperity of their respective republics through images of the mechanical arts and other human activities (Figures 6.5 and 6.6). Each monument thus identifies the mastery of theoretical and practical knowledge as foundational to the economic wealth and political power of the towns in question. This basic formula, based on the deployment of visual representations of learning and learnedness for purposes of political self-representation, is quite similar to that seen in the fresco cycles at Santi Quattro Coronati and Anagni, whose pictorial displays advanced the thirteenth-century papacy's portrayal of itself as a wellspring and proprietor of worldly and religious knowledge. There are other ways to relate the two papal murals to the civic monuments in Perugia, Florence, and Venice as well. The assembled nature and spatial layout of the sculptural cycles likely engendered viewing practices that resembled those identified for the two Conti murals. The Florence campanile and the Perugia fountain, in particular, required viewers to move around the monuments while studying the varied pictorial motifs. In the process, viewers could form interpretive connections between sculptural reliefs on different sides of the monuments, as in the case of the formal echo between the scenes depicting the creation of Adam and the art



6.5. Stone cutter from sculpted capitals in portico, ca. 1342–8, Doge's Palace, Venice. Photograph: Courtesy of Ian Coulling.



6.6. Andrea Pisano, Weaver, 1348–50, from south side of campanile, Museo dell'Opera del Duomo, Florence. Photograph: Steven Zucker, Smarthistory, Creative Commons Attribution, Non-Commercial, Share-Alike.

of sculpture on the campanile (Figures 6.7 and 6.8). Located on the west and north faces of the bell tower, respectively, these two scenes clearly invited viewers to ponder the relationship between divine and artistic creation by remembering, and mentally juxtaposing, the details of their similar

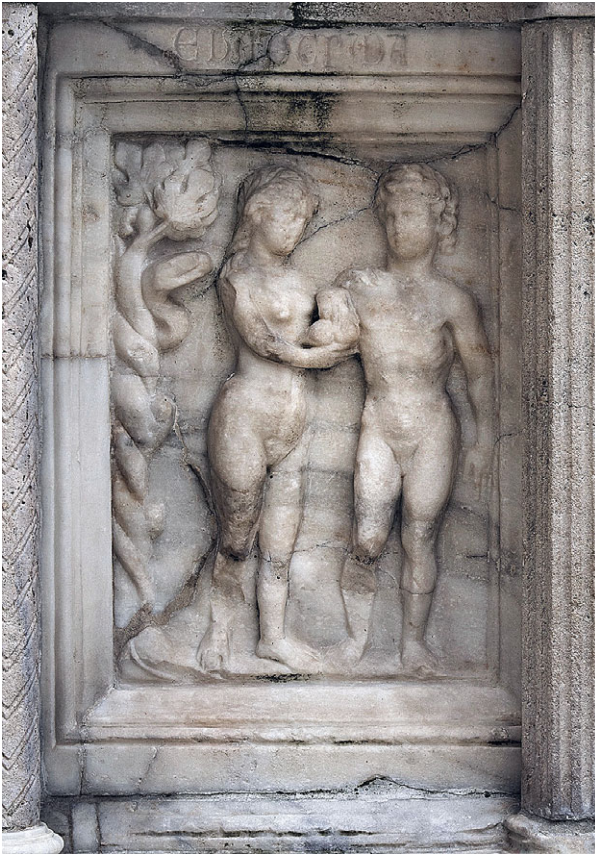


6.7. Andrea Pisano, Creation of Adam, 1334–43, from west side of campanile, Museo dell'Opera del Duomo, Florence. Photograph: Steven Zucker, Smarthistory, Creative Commons Attribution, Non-Commercial, Share-Alike.



6.8. Andrea Pisano, Sculpture, 1334–43, from west side of campanile, Museo dell'Opera del Duomo, Florence. Photograph: Steven Zucker, Smarthistory, Creative Commons Attribution, Non-Commercial, Share-Alike.

compositions. Similarly, on the Fontana Maggiore, several thematic echoes are established between scenes appearing on the lower and upper basins, including the recurring theme of creation across the images of Adam and Eve (creation of the human condition), Romulus and Remus (creation of Rome as an exemplary urban community), and the figure of Eulistes (the legendary founder of



6.9. Nicola and Giovanni Pisano, Original Sin, ca. 1278, Fontana Maggiore, Perugia. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Perugia) (Figures 6.9–6.11). These examples suggest that both monuments were designed to spur relational interpretations, with the meaning of one image shaped by that of another within the cycle. In this sense, each monument makes a case for erudite public sculpture as a means not only of representing knowledge but also of generating knowledge through associative viewing. Given the public setting of these sculptural monuments, it seems clear that their diverse imagery would have been spliced together and interpreted in manifold ways by viewers with differing levels of scholarly education and iconographic awareness.

Like the frescoes at Santi Quattro Coronati and Anagni, the large-scale artistic programs discussed above display the harmonious coexistence of worldly and sacred knowledge. The conscious foregrounding of this epistemic unison might be described as a hallmark of the varied encyclopedic pictorial cycles produced in Italy during the thirteenth and fourteenth centuries. A potent example is Serafino de' Serafini's monumental fresco known as the *Triumph of Saint Augustine*, painted around 1378–84 for the church of



6.10. Nicola and Giovanni Pisano, Romulus and Remus, ca. 1278, Fontana Maggiore, Perugia. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Sant'Andrea in Ferrara (Figure 6.12).⁵ The vast mural depicts Saint Augustine as a unifier of Christian theology – represented as the wheel of Ezekiel on Augustine's right – and ancient philosophy – represented as a cosmological diagram on his left. Below the wheel of Ezekiel are four representatives of theological knowledge: Jerome, John the Evangelist, Paul, and Moses. Below the cosmological diagram are four representatives of ancient philosophy: Aristotle, Plato, Socrates, and Seneca. This scheme might be productively compared to the compositions in the first two bays of the Anagni crypt, where historical representatives of medicine and astrology sit beneath diagrammatic representations of the microcosm and the celestial vault. Along the Ferrara fresco's middle register sit seven personified virtues, each trampling on a heretic who exemplifies the virtue's corresponding vice. These villains include characters such as Herod, Holofernes, Epicurus, and Sardanapalus, along with figures who also appear in the cycle of virtues and vices at Santi Quattro



6.111. Nicola and Giovanni Pisano, Eulistes (the legendary founder of Perugia), ca. 1278, Fontana Maggiore, Perugia. Photograph: Bibliotheca Hertziana – Max-Planck-Institut für Kunstgeschichte, Rome.

Coronati: Judas, Nero, and Arius. The fresco's bottom register, which is now quite damaged, originally included figures of the seven liberal arts accompanied by historical representatives. Still preserved in the lower right are the personifications of Music, seated behind the figure Tubalcain, and Astronomy, who sits in the company of Ptolemy.

Serafino's fresco thus thematizes the compatibility of worldly philosophy and Christian theology. It also highlights the historical role played by Augustine in bringing these two intellectual traditions into synergy with each other. This latter aspect is underscored in one of the scrolls displayed by the ancient bishop, which includes a citation from *On Christian Doctrine* in which Augustine makes a case for the usefulness of pagan philosophy in the proper interpretation of scripture. The wheel of Ezekiel on Augustine's right depicts



6.12. Serafino de' Serafini, *Triumph of Saint Augustine*, ca. 1378, detached fresco formerly in church of Sant'Andrea, now in Pinacoteca Nazionale, Ferrara. Photograph: Carlo Vannini; reproduced under license from Ministero della Cultura – Archivio Fotografico delle Gallerie Estensi.

the product of such selective appropriation of pagan learning. A series of inscriptions on the diagram delineate the foundational aspects of the exegetical method: probing the typological relationship between Old and New Testaments and examining the different levels of meaning that might be found in scriptural passages – literal, moral, natural, anagogical, historical, and

allegorical. The fresco's implication is that this interpretive procedure, which helps to uncover the truth in scripture, is indebted to and compatible with the teachings of ancient philosophers.

The frescoes at Santi Quattro Coronati and Anagni presented comparable arguments regarding the compatibility and epistemic synergy between worldly and religious knowledge. As we have seen, the Anagni frescoes integrated cosmological and medical images into a larger pictorial scheme devoted to the representation of human time in its entirety, from the world's creation to its unmaking. The unusually diagrammatic compositional formulas deployed in the crypt's Old Testament vaults reinforced the notion of harmonious coexistence between scriptural knowledge and astro-medical knowledge. The use of diagrammatic forms for narrative images afforded the biblical stories an epistemic charge that aligned them with the more prototypical diagrams in the crypt's cosmological cycle. Cardinal Conti's frescoes, too, presented worldly and religious knowledge as mutually constitutive. In the great hall, cosmological, temporal, educational, historical, theological, and antiquarian knowledge were all brought together into a spatially continuous and stylistically coherent image of the world. When considered in relation to the frescoes in the Sylvester Chapel, this notion of unity between the temporal and religious realms also took on political significance. With their iconographic references to the Donation of Constantine, the chapel frescoes argued that the worlds of religious and profane affairs were inseparable under the papacy's political authority.

The many conceptual and iconographic links between the two Conti murals and their pictorial successors in Venice, Ferrara, Florence, and Perugia underscore the vast potential for future research into the development of large-scale displays of knowledge on the Italian peninsula. This book has maintained a relatively tight focus on the frescoes at Santi Quattro Coronati while also outlining some of their many connections to the Anagni crypt. It has suggested that thirteenth-century Roman painters and their curial patrons played important roles in the creation of a new, intellectually engaging form of mural painting. Yet, the potential downstream effect of the Conti murals on later Italian art remains an open question. Even with regard to the more limited area of mid-thirteenth-century Roman art, many questions remain unanswered. This is especially the case for Cardinal Conti's great hall, on which art historical research is still in its infancy. The conclusions I have drawn and suggestions I have made about the Santi Quattro Coronati frescoes will hopefully engender new and fruitful avenues of inquiry. Some scholars will disagree with the arguments presented in this book, which is precisely how it should be. Ultimately, my interpretations of the Santi Quattro Coronati frescoes, as well as those in the Anagni crypt, can only reflect what these monuments mean to *me* at this particular moment in time. The claims I have made about the

advanced nature of the two monuments can only ever be claims, and I welcome their refutation, revision, and amelioration.

NOTES

- 1 Gosbert Schüßler, "Zum Thomasfresko des Andrea Bonaiuti in der Spanischen Kapelle am Kreuzgang von Santa Maria Novella," *Mitteilungen des Kunsthistorischen Institutes in Florenz* 24 (1980): 251–74; Diana Norman, "The Art of Knowledge: Two Artistic Schemes in Florence," in *Siena, Florence, and Padua: Art Society and Religion, 1280–1400* (New Haven, CT: Yale University Press, 1995), 2:217–41.
- 2 White, "The Reconstruction of Nicola Pisano's Perugia Fountain," 70–83; Carlo Santini, ed., *Linguaggio figurativo della Fontana Maggiore di Perugia* (Perugia: Calzetti Mariucci, 1996).
- 3 Marvin Trachtenberg, *The Campanile of Florence Cathedral* (New York: New York University Press, 1971), 85–108; Norman, "The Art of Knowledge"; Emma Simi Varanelli, *Artisti e dottori nel Medioevo. Il campanile di Firenze e la rivalutazione delle "arti belle"* (Rome: Istituto Poligrafico e Zecca dello Stato, 1995); Mariella Carlotti, *Il lavoro e l'ideale. Il ciclo delle formelle del campanile di Giotto* (Florence: Società Editrice Fiorentina, 2008).
- 4 Michele Tomasi, "'Programmes' encyclopédiques dans la sculpture monumentale à Florence et à Venise au milieu du XIVe siècle: possibilités et limites de l'analyse," in *Le programme: une notion pertinente en histoire de l'art médiéval?*, eds. Jean Marie Guillouët and Claudia Rabel (Paris: Le Léopard d'Or, 2011), 211–33.
- 5 Iris Helffenstein, *Wissenstransfer in Bildprogrammen des Trecento: Allegorie, Imitation und Medialität* (Paderborn: Brill and Wilhelm Fink, 2021), 179–255; Dorothee Hansen, *Das Bild des Ordenslehrers und die Allegorie des Wissens: Ein gemaltes Programm der Augustiner* (Berlin: Akademie Verlag, 1995), 11–41, 123–8.

APPENDIX

INSCRIPTIONS APPEARING IN THE AULA GOTICA FRESCOES

My transcription of the inscriptions in the great hall are based on those in Claudio Noviello, “Santi Quattro Coronati – Sala Gotica: L’apparato epigrafico,” in Draghi, *Gli affreschi*, CD-ROM appendix, 1–93. Like Noviello, I use brackets [/] to indicate lost letters and parentheses (/) to indicate abbreviations.

SOUTH BAY FRESCOES: LABORS OF THE MONTHS, WEST WALL

Scene 1: Month of January

- Inscription on border below scene: IENVARIVS VINVMQ(VE) CIBARIA QVERO (January, I receive wine and food)

Scene 2: Month of February

- Inscription on border below scene: FEBRARIVS (February)

Scene 3: Month of March

- Inscription within scene: MARTIVS (March)
- Inscription on border below scene: MENS HEBET OB SPINAS (the month suffers because of the thorns)

Scene 4: Month of April

- Inscription within scene: APRILIS (April)
- Inscription on border below scene: ORNATVS PECVDVM FLOS ARBOR DANT MICHI LVDVM (the coat of the sheep, the flowering of plants, give me delight)

SOUTH BAY FRESCOES: LABORS OF THE MONTHS, SOUTH WALL

Scene 5: Month of May

- Inscription within scene: MADIVS (May)
- Inscription on border below scene: [- - -?] TVMERE VO+[- - -]+PL[- - -] (too fragmented to interpret)

Scene 6: Month of June

- Inscription within scene: IVNIVS (June)
- Inscription on border below scene: ++[[- - -]O FRVCTVS SEGETESQ(VE)
[- - -]++ (too fragmented to interpret)

Scene 7: Month of July

- Inscription within scene: [I]V[LIVS] (July)
- Inscription on border below scene: OMNE LEGO +[- - - - - -]S
GRANVM PERAMENVVM (too fragmented to interpret)

Scene 8: Month of August

- Inscription within scene: AVGVST(VS)
- Inscription on border below scene: CERNO BONAS FICVS VVARVM GRA
+[- - - - - -] (only the first part of the inscription can be interpreted: I discern
the good figs)

SOUTH BAY FRESCOES: LABORS OF THE MONTHS, EAST WALL

Scene 9: Month of September

- Inscription within scene: SEPTEMBER (September)
- Inscription on border below scene: RIMAS VASORVM TOLLO
FVNDA TOR EORVM (I eliminate the cracks and put in place the hoops of
the barrels)

Scene 10: Month of October

- Inscription within scene: OCTVBER (October)
- Inscription on border below scene: ARENTES HIEMI PRESSI DANT
MVSTA RACEMI (dried in winter, the pressed grapes provide the must)

Scene 11: Month of November

- Inscription within scene: [NO]VE(M)BER (November)
- Inscription on border below scene: [- - -]O SPERANDO DEO PATRE
SOLO (too fragmented to interpret as a whole, but appears to reference the
hopes associated with a good agricultural harvest along with its underlying
spiritual significance)

Scene 12: Month of December

- Inscription within scene: D[EC]MBER (December)
- Inscription on border below scene: CARNES PORCINE DANT MAXIMA
DONA COQ[- - -] (pork gives the greatest gifts)

SOUTH BAY FRESCOES, LIBERAL ARTS, WEST WALL

Scene 1: Grammar

- Inscription on codex: A B C D [E F] [G H I] K [L] M [N O P Q] [R S T]

Scene 2: Geometry

- Inscription above personification: [GEOME]TR[I]A (Geometry)
- Inscription on scroll held by scientific representative: [- - -]++RE SPATIA [- - -] [DISTIN]NGVIT GEOME(TRIA) (too fragmented to interpret as a whole, but it appears to define geometry as an art form that concerns itself with determining spatial dimensions)
- Inscription on scroll held by personification: PRINCIPIVM ME(N)SVRE PV (N)TVS VOCAT (the point is the principle of all measurement)

SOUTH BAY FRESCOES, LIBERAL ARTS, SOUTH WALL

Scene 3: Music

- Inscription above personification: MVSICA (Music)
- Inscription on scroll held by scientific representative: MVSIC[A] [- - - - -] [C]ANIT ODA[S or ODAS?] RE [- - - - -] (too fragmented to interpret as a whole, but, as Noviello notes, the term CANIT refers to the activity of singing, the term ODAS to sacred music (or, if one hypothesizes ODAT, it would refer to the auditory reception of that which is sung), and finally, if one hypothesizes REBOAT or REBOANT for the last word, it would refer to the sound produced by musical instruments)
- Inscription on scroll held by personification: MVSICA E(ST) MOT(VS) VOCVM SCIE(N)TIA MODVLA(N)DI (music is the science of modulation and the movement of the voice)

Scene 4: Arithmetic

- Inscription on scroll held by scientific representative: NVM[ERVS?] [- - - - -] VN (too fragmented to interpret as a whole, but, as Noviello notes, the two truncated words NVM and VN might be hypothetically reconstructed as NVMERVS, referencing the activity of numeration, and VNVM, referencing the number one)

SOUTH BAY FRESCOES, LIBERAL ARTS, EAST WALL

Scene 5: Astronomy

- Inscription on scroll held by personification: [S]CIENTIA PLA[N]ETARV(M) (ET) CETERORVM ASSTORV(M) (science of the planets and the other celestial bodies)

SOUTH BAY FRESCOES, PERSONIFIED SEASONS

Scene 1: Winter (positioned above month of January)

- Inscription to left of personified season: ALGOR (Cold)
- Inscription to right of personified season: HIEMS (Winter)

Scene 2: Spring (positioned above months of April and May)

- Inscription to right of personified season: VER (Spring)

Scene 3: Summer (positioned above months of August and September)

- Inscription to left and right of personified season's head: ESTVS (Summer)

Scene 4: Autumn (positioned above month of December)

- Inscription to left of personified season: AVTVMPNVS (Autumn)

NORTH BAY FRESCOES: VIRTUES AND VICES, WEST WALL

Scene 1: Faith / Idolatry

- Inscription on border below scene: IDOLATR[IA] (Idolatry)

*Scene 2: Lost**Scene 3: Patience / Wrath*

- Inscription to right of personified virtue: PATIENTIA (Patience)
- Inscription to left of Job: J[O]B (Job)
- Inscription on scroll held by Wrath: PERSEQUAR CONP(RE)HENDAM
(I will pursue, I will overtake)
- Inscription on scroll held by Patience: DECLINA A MALO (ET) FAC BONU
(M) (turn away from evil and do good)

Scene 4: Humility / Pride

- Inscription to left of personified virtue: VMILITAS (Humility)
- Inscription to right of David: DAVIT RE[X] (King David)
- Inscription on scroll held by Humility: QUI SE HUMILIA[T]
EXALTABITUR (he who humbles himself shall be exalted)

NORTH BAY FRESCOES: VIRTUES AND VICES, NORTH WALL

Scene 5: Sobriety / Luxury

- Inscription to right of personified virtue: SOBRIETAS (Sobriety)
- Inscription to left of Daniel: [D]ANIEL

- Inscription on scroll held by Sobriety: VICTV[M] ET VESTITVM (food and clothes)
- Inscription on scroll held by Luxury: COMMEDAMVS ET BIBAMVS (let us eat and drink)
- Inscriptions on border below scene: LVXVRIA (Luxury); MAHOMET (Muhammad)

Scene 6: Concord / Discord

- Inscription to left of personified virtue: CONCORDIA (Concord)
- Inscription to left of Paul: PAVL(VS)
- Inscription on scroll held by Concord: CV(M) OMNIBVS PACE(M) HABEA (N)T (live in peace with everyone)
- Inscriptions on border below scene: DISCORDIA (Discord); A[RIVS?] (Arius?)

Scene 7: Solomon

- Inscription within scene: SALOMON (Solomon)

Scene 8: Magnanimity / Avarice

- Inscription to right of personified virtue: LARGITAS (Magnanimity)
- Inscription to left of Saint Lawrence: LA[V]RENTI(VS)
- Inscription on scroll held by Magnanimity: QVI PARCE SEMINAT PARCE ST METE[T] (whoever sows sparingly will reap sparingly – the ST [sic] was in all likelihood meant as ET)
- Inscription on scroll held by Avarice: NE SIT TE DITIOR ALTER (lest another be richer than you)
- Inscriptions on border below scene: [A]VARIT[I]A (Avarice); IVDAS (Judas)

Scene 9: True Religion / Hypocrisy

- Inscription to left of personification: VERA RELIGIO (True Religion)
- Inscription to right of Augustine: [AVGVSTIN(VS)]
- Inscription on scroll held by True Religion: RELIGIO MVNDA (ET) INMA (CVLATA) (pure and immaculate religion)
- Inscription on scroll held by Hypocrisy: IEIUNO BIS IN SABATO DECIMA (I fast twice a week [and give] a tenth [of all I get])
- Inscriptions on border below scene: YPOCRISIS (Hypocrisy); FAR[IS]EVS (Pharisee)

NORTH BAY FRESCOES: VIRTUES AND VICES, EAST WALL

Scene 10: Charity / Hate

- Inscription to right of personified virtue: KARITAS (Charity)
- Inscription to left of Peter: PETR(VS)

- Inscription on scroll held by Charity: LEGEM QVAM VIVES SI FRAT(R)E (M) DILIGIS INPLES (if you love your brother, you fulfill the law by which you live – the text paraphrases several biblical verses, including 1 Romans 13:8, 1 John 4:21, and 1 John 2:10)
- Inscription on scroll held by Nero: QVALITER HU(N)C Q(VI)S AMAT (S)IB (I) Q(VI) C(ON)TRARIUS EXTAT (how, then, could he love the one who appears contrary to himself – the text is a direct citation from the Proverbs of Wippo [J.-P. Migne, PL 142, col. 1261])
- Inscriptions on border below scene: [O]DIVM (Hate); NERO (Nero)

Scene 11: Fear of God / Vainglory

- Inscription to left of personified virtue: TIMOR D(OMN)NI (Fear of God)
- Inscription to right of Jerome: IERONIM(VS)
- Inscription on scroll held by Fear of God: INVE[- - -] SPE [- - -] LAV [- - -] QVE [- - -] (too fragmented to interpret)
- Inscription on scroll held by Vainglory: TE BONAFACORV(M) MANIFESTA FAMA TVORV(M) (your fame is manifest in your good deeds)
- Inscriptions on border below scene: INANIS GL(ORI)A (Vainglory); ALEXANDER (Alexander)

Scene 12: Heavenly Love / Love of the Present Era

- Inscription to right of personified virtue: AMOR CELESTIS (Heavenly Love)
- Inscription to left of Francis: FRANCIS[C(VS)]
- Inscription on scroll held by Amor Celestis: SI CARCER TALIS DE(VS) O TVA MA(N)TIO QVALIS (if this is the prison, what will be your home, O God)
- Inscription on border below scene: [IV]LIAN(VS) APOSTATA (Julian the Apostate)

Scene 13: Holy Emulation / Perverted Emulation

- Inscription to left of personified virtue: EMVLATIO S(AN)C(T)A (Holy Emulation)
- Inscription surrounding Dominic: DOMINIC(VS)
- Inscription on scroll held by Holy Emulation: EMVLOR VOS DEI EMVLATIONE (I am jealous for you with a godly jealousy)
- Inscription on scroll held by Perverted Emulation: EMVLANTVR VOS NON BENE (they make much of you, but for no good purpose)
- Inscriptions on border below scene: SIMON MAG(VS) (Simon Magus); EMVLATIO PERVERSA (Perverted Emulation)

BIBLIOGRAPHY

- Aavitsland, Kristin Bliksrud. *Imagining the Human Condition in Medieval Rome: The Cistercian Fresco Cycle at Abbazia delle Tre Fontane*. Farnham and Burlington, VT: Ashgate, 2012.
- Aavitsland, Kristin B. and Turid Karlsen Seim. "Inscriptions in Liturgical Spaces." *Acta ad Archaeologiam et Artium Historiam Pertinentia* NS 24:10 (2011) [special issue].
- Abulafia, David. *Frederick II: A Medieval Emperor*. London: Allen Lane, 1988.
- Abu Ma'shar, *Liber introductorii maioris ad scientiam iudiciorum astrorum*. Edited by Richard Lemay. 9 vols. Naples: Istituto Universitario Orientale, 1995.
- Ackermann, Silke. *Sternstunden am Kaiserhof: Michael Scotus und sein Buch von den Bildern und Zeichen des Himmels*. Frankfurt: Peter Lang, 2009.
- Akbari, Suzanne Conklin. *Idols in the East: European Representations of Islam and the Orient, 1100–1450*. Ithaca, NY: Cornell University Press, 2012.
- "The Rhetoric of Antichrist in Western Lives of Muhammad." *Islam and Christian-Muslim Relations* 8 (1997): 297–307.
- Seeing through the Veil: Optical Theory and Medieval Allegory*. Toronto: University of Toronto Press, 2004.
- Alan of Lille. *Anticlaudianus; or The Good and Perfect Man*. Translated and commentary by James J. Sheridan. Toronto: Pontifical Institute of Mediaeval Studies, 1973.
- The Plaint of Nature*. Translated and commentary by James J. Sheridan. Toronto: Pontifical Institute of Mediaeval Studies, 1980.
- Alberti, Leon Battista. *On the Art of Building in Ten Books*. Translated by Joseph Rykwert, Neil Leach, and Robert Tavernor. Cambridge, MA and London: MIT Press, 1988.
- Albertus Magnus, *Book of Minerals*. Translated by Dorothy Wickhoff. Oxford: Clarendon Press, 1977.
- Alexander, Jonathan. "Labeur and Paresse: Ideological Representations of Medieval Peasant Labor." *Art Bulletin* 72:3 (1990): 436–52.
- Alexandrenko, Nikolai. "The Poetry of Theodulf of Orleans: A Translation and Critical Study." PhD diss., Tulane University, 1970.
- Almond, Philip C. *The Antichrist: A New Biography*. Cambridge and New York: Cambridge University Press, 2020.
- Ambrosi de Magistris, Raffaele. *Storia di Anagni*. Rome: V. Apolloni, 1889.
- Andberg, Bjarne. "Osservazioni sulle modifiche delle volte nella cripta di Anagni." *Acta ad Archaeologiam et Artium Historiam Pertinentia* 6 (1975): 117–26.
- "Le paysage marin dans la crypte de la cathédrale d'Anagni." *Acta ad Archaeologiam et Artium Historiam Pertinentia* 2 (1965): 195–201.
- Andrews, Frances. "The Influence of Joachim in the 13th Century." In *A Companion to Joachim of Fiore*. Edited by Matthias Riedl, 190–266. Leiden and Boston, MA: Brill, 2017.
- Angeli, Stefano De. "Problemi di iconografia romana: dalle Moire alle Parche." *Mélanges de l'École Française de Rome* 103:1 (1991): 105–28.
- Armour, Peter. "Dante's *Contrapasso*: Context and Texts." *Italian Studies* 55 (2000): 1–20.

- Asmussen, Marianne W. "The Chapel of S. Zeno in S. Prassede in Rome." *Analecta Romanae Instituti Danici* 15 (1986): 67–87.
- Atkinson, Niall. *The Noisy Renaissance: Sound, Architecture and Florentine Urban Life*. University Park: Penn State University Press, 2016.
- Auerbach, Erich. "Figura." In *Scenes from the Drama of European Literature*. Translated by Ralph Manheim. Minneapolis: University of Minnesota Press, 1984.
- Aurelius Clemens Prudentius. *Psychomachia*. Translated by H. J. Thomson. Loeb Classical Library 1. Cambridge, MA: Harvard University Press, 1949.
- Azolini, Monica. *The Duke and the Stars: Astrology and Politics in Renaissance Milan*. Cambridge, MA: Harvard University Press, 2013.
- Bacon, Roger. *De retardatione accidentium senectutis: cum aliis opusculis de rebus medicinalibus*. Edited by A. G. Little and E. Withington. Farnborough: Gregg, 1966.
- Baer, Eva. *Ayyubid Metalwork with Christian Images*. Leiden and New York: Brill, 1989.
- Bagnoli, Martina. "Le fonti e documenti per l'indagine iconografica." In *Un universo di simboli: gli affreschi della cripta nella cattedrale di Anagni*. Edited by Gioacchino Giammaria, 71–86. Rome: Viella, 2001.
- "The Medieval Frescoes in the Crypt of the Duomo of Anagni." PhD diss., Johns Hopkins University, 1998.
- "A Pilgrim's Prayer for Salvation: The Miracles of Saint Magnus in the Crypt of Anagni Cathedral." In *Shaping Sacred Space and Institutional Identity in Romanesque Mural Painting: Essays in Honour of Otto Demus*. Edited by Thomas E. A. Dale, 69–94. London: Pindar Press, 2004.
- "The Syzygy at Anagni. Measuring the Gap between Concept and Execution in Medieval Wall Painting." *Zeitschrift für Kunstgeschichte* 72 (2009): 313–28.
- "'Ut Domus Tali Ornetur Decore': Metamorphosis of Ornamental Motifs in Anagni and Rome." In *Roma Felix: Formation and Reflections of Medieval Rome*. Edited by Éamonn Ó Carragain and Carol Neuman de Vegvar, 207–33. Aldershot: Ashgate, 2007.
- Bain, Jill. "Signifying Absence: Experiencing Monochrome Imagery in Medieval Painting." In *A Wider Trecento: Studies in 13th and 14th Century European Art Presented to Julian Gardner*. Edited by Louise Bourdua and Robert Gibbs, 5–20. Leiden: Brill, 2012.
- Baldwin, Marshall. "The Popes and Learning in the High Middle Ages." *Manuscripta* 1 (1957): 150–8.
- Balthasar, Hans Urs von, ed. *Origen, Spirit and Fire: A Thematic Anthology of His Writings*. Translated by Robert J. Daly, SJ. Washington, DC: Catholic University of America Press, 2001.
- Barbier de Montault, Xavier. *La Cathédrale d'Anagni*. Paris: Librairie Archéologiques de Victor Didron, 1858.
- Barelli, Lia. "Architetture altoresidenziali a Roma nel XIII secolo: alcune osservazioni." In *Cinte murarie e abitati: Restauro, riuso e valorizzazione*. Edited by Roberta Maria Dal Mas and Rossana Mancini, 133–43. Ariccia: Aracne, 2015.
- The Monumental Complex of Santi Quattro Coronati in Rome*. Translated by Christopher McDowall. Rome: Viella, 2009.
- "Il palazzo cardinalizio dei SS. Quattro Coronati a Roma nel Basso Medioevo." In *Il Lazio tra antichità e medioevo: studi in memoria di Jean Coste*. Edited by Zaccaria Mari, Maria Teresa Petrara, and Maria Sperandio, 111–24. Rome: Quasar, 1999.
- Barkan, Leonard. *Nature's Work of Art: The Human Body as Image of the World*. New Haven, CT and London: Yale University Press, 1975.
- Barral i Altet, Xavier. "Le plafond cosmologique de la chambre de la comtesse Adèle de Blois d'après Baudri de Bourgueil." *Bulletin de la Société Nationale des Antiquaires de France* (1988): 85–92.
- Baschet, Jérôme. *Lieu sacré, lieu d'images: Les fresques de Bominaco (Abruzzes, 1263), themes,*

- parcours, fonctions*. Paris and Rome: École Française de Rome, 1991.
- "I peccati capitali e le loro punizioni nell'iconografia medievale." In *I sette vizi capitali: Storia dei peccati nel Medioevo*. Edited by Carla Casagrande and Silvana Vecchio, 225–60. Turin: Einaudi, 2000.
- Beccaria, Augusto. *I codici di medicina del periodo presalernitano (secoli IX, X e XI)*. Rome: Edizioni di Storia e Letteratura, 1956.
- Becker-Freysing, Albrecht. *Die Vorgeschichte des philosophischen Terminus "contingens": Die Bedeutungen von "contingens" bei Boethius und ihr Verhältnis zu den Aristotelischen Möglichkeitsbegriffen*. Heidelberg: F. Bilabel, 1932.
- Bedini, Silvio A. and Francis Maddison. "Mechanical Universe: The Astrarium of Giovanni de' Dondi." *Transactions of the American Philosophical Society* 56:5 (1966): 1–69.
- Beinhauer-Köhler, Bärbel, Eckart Otto, Gottfried Reeg, Birgit Krawietz, and Werner Ogris. "Talion." In *Religion Past and Present: Encyclopedia of Theology and Religion*. Edited by Hans Dieter Betz, Don S. Browning, Bernd Janowski, and Eberhard Jüngel, 12:475–9. Leiden and Boston, MA: Brill, 2012.
- Belting, Hans. *An Anthropology of Images: Picture, Medium, Body*. Princeton, NJ: Princeton University Press, 2011.
- Bender, John and Michael Marrinan. *The Culture of Diagram*. Stanford, CA: Stanford University Press, 2010.
- Benjamin, Francis S. and Gerald J. Toomer. *Campanus of Novara and Medieval Planetary Theory. Theorica Planetarum*. Publications in Medieval Science 16. Madison: University of Wisconsin Press, 1971.
- Berenbeim, Jessica. *Art of Documentation: Documents and Visual Culture in Medieval England*. Toronto: Pontifical Institute of Mediaeval Studies, 2015.
- Bergmeier, Armin F. "Dominanz der Imagination: Die Konstruktion immersiver Räume in der Spätantike." In *Jahrbuch immersiver Medien [2012]: Bildräume: Grenzen und Übergänge*, 37–48. Marburg: Schüren, 2012.
- "The *Traditio Legis* in Late Antiquity and Its Afterlives in the Middle Ages." *Gesta* 56:1 (2017): 27–52.
- Berisso, Marco, ed. *L'Intelligenza: poemetto anonimo del secolo XIII*. Milan: Fondazione Pietro Bembo, 2000.
- Bernacchio, Nicoletta. "Una veduta di Roma nel XIII secolo dalla cripta della cattedrale di Anagni." *Archeologia Medievale* 22 (1995): 519–29.
- Bernard, Robert William. "In Figura: Terminology Pertaining to Figurative Exegesis in the Works of Augustine of Hippo." PhD diss., Princeton University, 1984.
- Bernardus Silvestris. *Cosmographia*. Edited with introduction and notes by Peter Dronke. Leiden: Brill, 1978.
- Bertelli, Carlo. "Calendari." *Paragone* 20 (1970): 53–60.
- "L'Enciclopedia delle Tre Fontane." *Paragone* 20:235 (1969): 24–49.
- Bianchi, Alessandro. "Lo stato degli studi." In *Il restauro della cripta di Anagni*. Edited by Alessandro Bianchi, 49–76. Rome: Artemide, 2003.
- "Una proposta per l'inquadramento storico degli affreschi della cappella di S. Gregorio al S. Speco di Subiaco." In *Federico II e l'arte del Duecento italiano: atti della III Settimana di studi su storia dell'arte medievale dell'Università di Roma, 15–20 maggio 1978*. Edited by Angiola Maria Romanini, 5–14. Galatina: Congedo, 1980.
- Binding, Günther. *Antike Säule als Spolien in früh- und hochmittelalterlichen Kirchen und Pfälzen – Materialspolie oder Bedeutungsträger?* Stuttgart: Franz Steiner, 2007.
- Binkley, Peter, ed. *Pre-Modern Encyclopaedic Texts: Proceedings of the Second COMERS Congress, Groningen, 1–4 July 1996*. Leiden: Brill, 1997.
- Birt, Theodor. *Die Buchrolle in der Kunst: archäologisch-antiquarische Untersuchungen zum antiken Buchwesen*. Hildesheim: Georg Olms, 1976.
- Birth, Kevin K. *Objects of Time: How Things Shape Temporality*. New York: Palgrave Macmillan, 2012.

- Bischoff, Bernhard, Bruce Eastwood, Thomas Klein, Florentine Mutherich, and Pieter F. J. Obbema. *Aratea. I: Kommentar zum Aratus des Germanicus, Ms. Voss. Lat. Q. 79, Bibliothek der Rijksuniversiteit Leiden*. Lucerne: Faksimile Verlag, 1989.
- Bjørnebye, Jonas. "Mithras Tauroctonos in Late Antique Rome." *Acta ad Archaeologiam et Artium Historiam Pertinentia* 27 (2014): 71–98.
- Blennow, Anna. "Wanderers and Wonders: The Medieval Guidebooks to Rome." In *Rome and the Guidebook Tradition: From the Middle Ages to the 20th Century*. Edited by Anna Blennow and Stefano Fogelberg Rota, 33–87. Berlin: Walter de Gruyter, 2019.
- Blume, Dieter. "Die Aula Gotica von Santi Quattro Coronati, Kosmos, Antike und Tugenden im Selbstverständnis der Kurie." In *Die Päpste und Rom zwischen Spätantike und Mittelalter: Formen Papstlicher Machtentfaltung*. Edited by Tanja Michalsky, Norbert Zimmermann, Stefan Weinfurter, and Alfried Wiczorek, 213–33. Regensburg: Schnell und Steiner, 2017.
- "Körper und Kosmos im Mittelalter." In *Bild und Körper im Mittelalter*. Edited by Kristin Marek and Raphaële Preisinger, 225–41. Paderborn: Fink, 2006.
- "Michael Scot, Giotto and the Construction of New Images of the Planets." *Images of the Pagan Gods: Warburg Institute Colloquia* 14 (2009): 129–38.
- Regenten des Himmels: Astrologische Bilder in Mittelalter und Renaissance*. Berlin: Akademie Verlag, 2000.
- "Sternbilder des Mittelalters – Imaginationen des Wissens und Begehrens." In *Quel corps? Eine Frage der Repräsentation*. Edited by Hans Belting, Dietmar Kamper, and Michael Schulz, 247–68. Munich: Fink, 2002.
- Blume, Dieter, Mechthild Haffner, and Wolfgang Metzger. *Sternbilder des Mittelalters: der gemalte Himmel zwischen Wissenschaft und Phantasie*. Berlin: Akademie Verlag, 2012.
- Blumenberg, Hans. "Kontingenz." In *Religion in Geschichte und Gegenwart*. 3rd edition. Edited by Kurt Galling, 3:1793–4. Tübingen: Mohr, 1959.
- The Legitimacy of the Modern Age*. Translated by Robert M. Wallace. Cambridge, MA: MIT Press, 1983.
- Blumenthal, Uta-Renate. *The Investiture Controversy: Church and Monarchy from the Ninth to the Twelfth Century*. Philadelphia: University of Pennsylvania Press, 1988.
- Boase, T. S. R. *Boniface VIII*. London: Constable, 1933.
- Bober, Harry. "An Illustrated Medieval School-Book of Bede's 'De natura rerum'." *Journal of the Walters Art Gallery* 19–20 (1956–7): 65–97.
- "In Principio. Creation Before Time." In *De Artibus Opuscula X: Essays in Honor of Erwin Panofsky*. Edited by Millard Meiss, 1:13–28. New York: New York University, 1961.
- "The Zodiacal Miniature of the Très Riches Heures of the Duke of Berry: Its Sources and Meaning." *Journal of the Warburg and Courtauld Institutes* 11 (1948): 1–34.
- Boethius, *Fundamentals of Music*. Translated, with Introduction and Notes by Calvin M. Bower. Edited by Claude Palisca. Music Theory Translation Series. New Haven, CT and London: Yale University Press, 1989.
- Theological Tractates: The Consolation of Philosophy*. Translated by H. F. Stewart, E. K. Rand, and S. J. Tester. Loeb Classical Library 74. Cambridge, MA: Harvard University Press, 1973.
- Bøgh Rasmussen, Mikael. "Traditio legis?" *Cahiers Archéologiques Fin de l'Antiquité et Moyen Age* 47 (1999): 5–37.
- Bokody, Péter. "Mural Painting as a Medium: Technique, Representation, and Liturgy." In *Image and Christianity: Visual Media in the Middle Ages*. Edited by Péter Bokody, 136–53. Pannonhalma: Pannonhalma Főapátság, 2014.
- Bolton, Brenda. "Subiaco – Innocent III's Version of Elijah's Cave." *Studies in Church History* 46 (2010): 111–23.
- Bond, Gerald A. *The Loving Subject: Desire, Eloquence, and Power in Romanesque France*. Philadelphia: University of Pennsylvania Press, 1995.
- Boschung, Dietrich and Susanne Wittekind, eds. *Persistenz und Rezeption: Weiterverwendung,*

- Wiederverwendung und Neuinterpretation antiker Werke im Mittelalter*. Wiesbaden: Reichert, 2008.
- Bose, Mishtooni. "From Exegesis to Appropriation: The Medieval Solomon." *Medium Aevum* 65:2 (1996): 187–210.
- Boskovits, Miklos. "Gli affreschi del Duomo di Anagni: un capitolo di pittura romana." *Paragone* 30:357 (1979): 3–41.
- Bosman, Lex. "Spolien aus Roms Vergangenheit als Beitrag zu römischer oder romanischer Architektur." In *Romanik in Europa: Kommunikation – Tradition – Rezeption*. Edited by Leonhard Helten and Wolfgang Schenkluhn, 37–51. Leipzig: Kratzke Verlag für Kunst und Kulturgeschichte, 2009.
- Boudet, Jean-Patrice. "Astrology." In *Medieval Science, Technology, and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 61–4. New York: Routledge, 2005.
- Entre science et nigromance: astrologie, divination et magie dans l'occident médiéval (XIIe–XVe siècle)*. Paris: Publications de la Sorbonne, 2006.
- "Le modèle du roi sage aux XIIIe et XIVe siècles." *Revue Historique* 647 (2008): 545–66.
- Bouras-Vallianatos, Petros and Barbara Zipser. *Brill's Companion to the Reception of Galen*. Leiden: Brill, 2019.
- Boureau, Alain. *Satan the Heretic: The Birth of Demonology in the Medieval West*. Chicago: University of Chicago Press, 2006.
- Bovey, Muriel. *Disciplinae cyclica: l'organisation du savoir dans l'oeuvre de Martianus Capella*. Trieste: Edizioni Università di Trieste, 2003.
- Bram, Shahar. "Ekphrasis as a Shield: Ekphrasis and the Mimetic Tradition." *Word & Image* 22 (2006): 372–8.
- Brancone, Valentina. "Complimenti iconografici per il calendario dipinto dell'oratorio di San Pellegrino a Bominaco." *Arte Medievale* NS 3 (2004): 75–108.
- Brenk, Beat. "Bildprogramm und Geschichtsverständnis der Kapetinger im Querhaus der Kathedrale von Chartres." *Arte Medievale* 2:5 (1991): 71–96.
- Brentano, Robert. *Rome Before Avignon: A Social History of Thirteenth Century Rome*. Berkeley and Los Angeles: University of California Press, 1990.
- Brentjes, Sonja. "Euclid." In *Medieval Science, Technology and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 164–7. New York and London: Routledge, 2005.
- Bronner, Leila Leah. *The Stories of Elijah and Elisha as Polemics against Baal Worship*. Leiden: Brill, 1968.
- Brown, Shirley Ann and Michael W. Herren. "The Adelae Comitissae of Baudri of Bourgeuil and the Bayeux Tapestry." *Anglo-Norman Studies* 16 (1993): 55–73.
- Budde, Rainer. *Deutsche romanische Skulptur 1050–1250*. Munich: Hirmer, 1979.
- Bumke, Joachim. *Courtly Culture: Literature and Society in the High Middle Ages*. Berkeley: University of California Press, 1991.
- Burke, Peter. *The Renaissance Sense of the Past*. New York: St. Martin's Press, 1970.
- Burnett, Charles. "Abu Ma'shar." In *Medieval Science, Technology, and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 4–5. New York: Routledge, 2005.
- Arabic into Latin in the Middle Ages: The Translators and Their Intellectual and Social Context*. Farnham: Ashgate, 2009.
- "Arabic into Latin: The Reception of Arabic Philosophy in Western Europe." In *The Cambridge Companion to Arabic Philosophy*. Edited by Peter Adamson and Richard C. Taylor, 370–404. Cambridge and New York: Cambridge University Press, 2005.
- "The Astrologer's Advice in Matters of War." In *Mantova e il rinascimento Italiano. Studi in onore di David S. Chambers*. Edited by G. Rebecchini and P. Jackson, 251–8. Mantua: Sumetti, 2011.
- "The Coherence of the Arabic–Latin Translation Program in Toledo in the Twelfth Century." *Science in Context* 14 (2001): 249–88.
- "John of Seville and John of Spain: a mise au point." *Bulletin de Philosophie Médiévale* 44 (2003): 59–78.

- "Michael Scot and the transmission of scientific culture from Toledo to Bologna via the court of Frederick II Hohenstaufen." In *Le scienze alla corte di Federico II. Sciences at the Court of Frederick II*. Edited by Michael McVaugh and Véronique Pasche, 101–26. Turnhout: Brepols, 1994.
- "Translating from Arabic into Latin in the Middle Ages: Theory, Practice, and Criticism." In *Editer, traduire, interpréter: Essais de méthodologie philosophique*. Edited by S. G. Lofts and P. W. Rosemann, 55–78. Louvain: Peeters, 1997.
- "The 'Translation' of Diagrams and Illustrations from Arabic into Latin." In *Arab Painting: Text and Image in Illustrated Arabic Manuscripts*. Edited by Anna Contadini, 161–76. Leiden and Boston, MA: Brill, 2007.
- Burnett, Charles, Michio Yano, and Keiji Yamamoto. *Abu Ma'sar: The Abbreviation of the Introduction to Astrology, together with the Medieval Latin Translation of Adelard of Bath*. Leiden: Brill, 1994.
- Burstyn, Shai. "In Quest of the Period Ear." *Early Music* 25 (1997): 692–701.
- Butterfield, Ardis. "Le tradizioni della canzone cortese medievale." In *Enciclopedia della musica. The Einaudi Encyclopedia of Music*, 4:130–51. Turin: Einaudi, 2004.
- Butting, Klara. "'Abel steh Auf!' – Die Geschichte von Kain und Abel – und Schet (Gen. 4.1–26)." *Bibel und Kirche* 58 (2003): 16–19.
- Bynum, Caroline Walker. *Christian Materiality: An Essay on Religion in Late Medieval Europe*. New York: Zone Books, 2015.
- _____. *Metamorphosis and Identity*. New York: Zone Books, 2005.
- _____. *The Resurrection of the Body in Western Christianity, 200–1336*. New York: Zone Books, 1995.
- Cahen, C. "La Djazira au milieu du treizième siècle d'après 'Izz-ad-Din Ibn Chaddad.'" *Revue des Études Islamiques* VIII (1934): 109–28.
- Camille, Michael. "The Body and the Self: Unwriting Medieval Bodies." In *Framing Medieval Bodies*. Edited by Sarah Kay, 62–99. Manchester: Manchester University Press, 1994.
- _____. *The Gothic Idol: Ideology and Image-Making in Medieval Art*. New York: Cambridge University Press, 1989.
- _____. "The Gothic Sign and the Surplus: The Kiss on the Cathedral." *Yale French Studies. Special Issue: Contexts: Style and Values in Medieval Art and Literature* (1991): 151–70.
- _____. *Image on the Edge: The Margins of Medieval Art*. Cambridge, MA: Harvard University Press, 1992.
- _____. "'For Our Devotion and Pleasure': The Sexual Objects of Jean, Duc de Berry." *Art History* 24:2 (2001): 169–94.
- _____. "'When Adam Delved': Laboring on the Land in English Medieval Art." In *Agriculture in the Middle Ages: Technology, Practice, and Representation*. Edited by Del Sweeney, 247–76. Philadelphia: University of Pennsylvania Press, 1995.
- Campbell, C. Jean. "The City's New Clothes: Ambrogio Lorenzetti and the Poetics of Peace." *Art Bulletin* 83 (2001): 240–58.
- _____. *The Commonwealth of Nature: Art and Poetic Community in the Age of Dante*. University Park: Pennsylvania State University Press, 2008.
- Campbell, Sheila D. *The Mosaics of Antioch*. Toronto: Pontifical Institute of Medieval Studies, 1988.
- Caniglia Mola, Emma. "La Decorazione Pittorica del Palazzo di Bonifacio VIII ad Anagni." *Latium: Rivista di Studi Storici* 7 (1990): 31–56.
- Capitani, Ovidio. "Gregorio IX." In *Dizionario biografico degli italiani*, 59:166–78. Rome: Istituto della Enciclopedia Italiana, 2003.
- _____. "Gregorio IX." In *Enciclopedia dei papi*, 2:363–80. Rome: Istituto della Enciclopedia Italiana, 2000.
- Cappelletti, Lorenzo. *Gli affreschi della cripta anagnina: iconologia*. Rome: Editrice Pontificia Università Gregoriana, 2002.
- _____. "L'immagine di San Francesco nell'Aula gotica dei SS. Quattro Coronati a Roma." *Frate Francesco* NS 87 (2021): 327–66.

- "Su gli affreschi della cripta della cattedrale di Anagni." *Archivum Historiae Pontificiae* 40 (2003): 307–22.
- Carbonara, Giovanni and Antonio Bianchi. "Sul Cosiddetto Palazzo di Bonifacio VIII in Anagni: Dalla Storia al Restauro." *Palladio: Rivista di Storia dell'Architettura e Restauro* NS 2:3 (1989): 19–60.
- Carey, Hilary M. "Astrology in the Middle Ages." *History Compass* 8:8 (2010): 888–902.
- Courting Disaster: Astrology at the English Court and University in the Later Middle Ages*. New York: St. Martin's Press, 1992.
- "Judicial Astrology in Theory and Practice in Later Medieval Europe." *Studies in History and Philosophy of Biological and Biomedical Sciences* 41 (2010): 90–8.
- "What Is the Folded Almanac? The Form and Function of a Key Manuscript Source for Astro-Medical Practice in Later Medieval England." *Social History of Medicine* 16:3 (2003): 481–509.
- Carey, Moya. "Mapping the Mnemonic: A Late Thirteenth-Century Copy of al-Sufi's Book of the Constellations." In *Arab Painting: Text and Image in Illustrated Arabic Manuscripts*. Edited by Anna Contadini, 65–72. Leiden: Brill, 2007.
- Carlotti, Mariello. *Il lavoro e l'ideale. Il ciclo delle formelle del campanile di Giotto*. Florence: Società Editrice Fiorentina, 2008.
- Carruthers, Mary J. *The Book of Memory: A Study of Memory in Medieval Culture*. 2nd edition. Cambridge and New York: Cambridge University Press, 2008.
- The Craft of Thought: Meditation, Rhetoric and the Making of Images, 400–1200*. Cambridge and New York: Cambridge University Press, 1998.
- "The Poet as Master Builder: Composition and Locational Memory in the Middle Ages." *New Literary History* 24 (1993): 881–904.
- Carruthers, Mary and Jan M. Ziolkowski. *Medieval Craft of Memory: An Anthology of Texts and Pictures*. Philadelphia: University of Pennsylvania Press, 2002.
- Cary, George. *The Medieval Alexander*. Cambridge: Cambridge University Press, 1956.
- Cassiodorus Senator. *Introduction to Divine and Human Readings*. Translated by Leslie Webber Jones. New York: Columbia University Press, 1946.
- Castelli, Elizabeth. *Martyrdom and Memory: Early Christian Culture Making*. New York: University of Columbia Press, 2004.
- Castiñeiras González, M. A. "Mesi." In *Enciclopedia dell'arte medievale*, 8:325–35. Rome: Istituto della Enciclopedia Italiana, 1991–2000.
- Caviness, Madeline H. "Images of Divine Order and the Third Mode of Seeing." *Gesta* 22 (1984): 99–120.
- Visualizing Women in the Middle Ages: Sight, Spectacle, and Scopic Economy*. University Park: Pennsylvania State University Press, 2001.
- Chadwick, Henry. *Boethius: The Consolations of Music, Logic, Theology, and Philosophy*. Oxford: Clarendon Press, 1990.
- Chamberlin, John. *Medieval Arts Doctrines on Ambiguity and Their Places in Langland's Poetics*. Montreal and Kingston: McGill-Queen's University Press, 1999.
- Charles-Murray, Mary. "The Emergence of Christian Art." In *Picturing the Bible: The Earliest Christian Art*. Edited by Jeffrey Spier, 51–64. New Haven, CT and London: Yale University Press, 2007.
- Chase, George Henry. *The Loeb Collection of Arretine Pottery*. New York: Fogg Art Museum, 1908.
- Chenu, Marie-Dominique. *Nature, Man, and Society in the Twelfth Century: Essays on New Theological Perspectives in the Latin West*. Translated by Jerome Taylor and Lester K. Little. Chicago: University of Chicago Press, 1968.
- Chiesa, Paolo. "Gregorio di Montesacro." In *Dizionario biografico degli italiani*, 59:275–7. Rome: Istituto della Enciclopedia Italiana, 2003.
- Chrétien de Troyes. *Érec and Énide*. Translated by Burton Raffel. New Haven, CT and London: Yale University Press, 1997.

- Ciccuto, Marcello. "Codici figurati romanzi al servizio di Madonna Intelligenza." *Mediaevistik* 6 (1993): 17–43.
- Il Restauro de "L'Intelligenza" e altri studi dugenteschi*. Pisa: Giardini, 1985.
- Ciliberti, Galliano. "Libri di musica e liturgici nelle biblioteche dei cardinali del Duecento." In *Album amicorum Albert Dunning: In occasione del suo LXV compleanno*. Edited by Giacomo Fornari, 71–132. Turnhout: Brepols, 2002.
- Claridge, Amanda and John Osborne. *The Paper Museum of Cassiano dal Pozzo: Early Christian and Medieval Antiquities. Volume 1: Mosaics and Wallpaintings in Roman Churches*. London: Harvey Miller, 1996.
- Clark, Charles. "The Zodiac Man in Medieval Medical Astrology." *Journal of the Rocky Mountain Medieval and Renaissance Association* 3 (1982): 13–38.
- Clark, Mark. *The Making of the Historia Scholastica, 1150–1200*. Toronto: Pontifical Institute of Mediaeval Studies, 2015.
- Clark, Vicky Armstrong. "The Abridged Astrological Treatises of Albumasar: Medieval Astrological Imagery in the West." PhD diss., University of Michigan, 1979.
- Clarke, John R. *Roman Black-and-White Figural Mosaics*. New York: College Art Association, 1979.
- Classen, Peter. "Rom und Paris: Kurie und Universität im 12. und 13. Jahrhundert." In *Studium und Gesellschaft im Mittelalter*. Edited by Johannes Fried, 127–69. Stuttgart: Anton Hiersemann, 1983.
- Cleaver, Laura. *Education in Twelfth-Century Art and Architecture: Images of Learning in Europe, c. 1100–1220*. Woodbridge: Boydell Press, 2012.
- "The Liberal Arts in Sculpture and Metalwork." *Immediations: Research Journal of the Courtauld Institute of Art* 4 (2007): 57–75.
- Clemente, Linda M. *Literary Objets d'Art: Ekphrasis in Medieval French Romance, 1150–1210*. New York: Peter Lang, 1992.
- Cochrane, Laura. "Secular Learning and Sacred Purpose in a Carolingian Copy of Boethius's *De institutione arithmetica* (Bamberg, Staatsbibliothek, Msc. Class. 5)." *Peregrinations: Journal of Medieval Art and Architecture* 5:1 (2015): 1–35.
- Coene, Karen de. *Liber Floridus: The World in a Book*. Lannoo: Tielt, 2011.
- Cohen, Adam S. "Making Memories in a Medieval Miscellany." *Gesta* 48 (2009): 1–18.
- Cole, Bruce. "Virtues and Vices in Giotto's Arena Chapel Frescoes." In *Studies in the History of Italian Art, 1250–1550*. London: Pindar Press, 1996.
- Collins, Amanda. *Greater Than Emperor: Cola di Rienzo (ca. 1313–54) and the World of Fourteenth-Century Rome*. Ann Arbor: University of Michigan Press, 2002.
- Conger, George Perrier. *Theories of Macrocosms and Microcosms in the History of Philosophy*. New York: Columbia University Press, 1922.
- Connolly, Daniel K. "Imagined Pilgrimage in the Itinerary Maps of Matthew Paris." *Art Bulletin* 81 (1999): 598–622.
- Conte, Gian Biagio. *Genres and Readers: Lucretius, Love Elegy, Pliny's Encyclopedia*. Baltimore: Johns Hopkins University Press, 1994.
- Cooper, Glen M. "Galen and Astrology: A Mésalliance?" *Early Science and Medicine* 16:2 (2011): 120–46.
- Cooper, Helen. "Gender and Personification in Piers Plowman." *Yearbook of Langland Studies* 5 (1991): 31–48.
- Copeland, Rita. "The Pardoner's Body and the Disciplining of Rhetoric." In *Framing Medieval Bodies*. Edited by Sarah Kay and Miri Rubin, 138–59. Manchester and New York: Manchester University Press, 1994.
- Rhetoric, Hermeneutics, and Translation in the Middle Ages: Academic Traditions and Vernacular Texts*. Cambridge and New York: Cambridge University Press, 1991.
- Craig, William Lane. *The Problem of Divine Foreknowledge and Future Contingents from Aristotle to Suarez*. Leiden and New York: Brill, 1988.
- Craik, Elizabeth M. *The "Hippocratic" Corpus: Content and Context*. London and New York: Routledge, 2015.

- Cristiani Testi and Maria Laura. "Consolo: Il Maestro del busto di Innocenzo III e i collaboratori negli affreschi del Sacro Speco di Subiaco." In *Roma anno 1300*. Edited by Angiola Maria Romanini, 5–14. Rome: L'Erma di Bretschneider, 1983.
- "Gli affreschi del Sacro Speco." In *I Monasteri benedettini di Subiaco*. Edited by Claudio Giumelli, 95–132. Milan: Silvana, 2002.
- Currid, John D. *Against the Gods: The Polemical Theology of the Old Testament*. Wheaton, IL: Crossway, 2013.
- Ancient Egypt and the Old Testament*. Grand Rapids, MI: Baker Books, 1997.
- Curtius, Ernst Robert. *European Literature and the Latin Middle Ages*. Translated by Willard R. Trask. Princeton, NJ: Princeton University Press, 1990.
- Dale, Thomas E. A. "From 'Icons in Space' to Space in Icons: Pictorial Models for Public and Private Ritual in the Thirteenth-Century Mosaics of San Marco in Venice." In *Hierotopy: Comparative Studies of Sacred Spaces*. Edited by Alexei Lidov, 139–52. Moscow: Indrik, 2009.
- Relics, Prayer, and Politics in Medieval Venetia: Romanesque Painting in the Crypt of Aquileia Cathedral*. Princeton, NJ: Princeton University Press, 1997.
- Dalomi, Davide. "Jubal, Pythagoras, and the Myth of the Origin of Music." *Philomusica Online* 16 (2017): 1–42.
- D'Alverny, Marie-Thérèse. "L'Homme comme symbole, le microcosme." In *Simboli e Simbologia nell'alto Medioevo*, 123–95. Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1976.
- "Translations and Translators." In *Renaissance and Renewal in the Twelfth Century*. Edited by Robert L. Benson and Giles Constable, 421–62. Oxford: Clarendon Press, 1982.
- Daniel, E. Randolph. "Joachim of Fiore: Patterns of History in the Apocalypse." In *The Apocalypse in the Middle Ages*. Edited by Richard K. Emmerson and Bernard McGinn, 72–88. Ithaca, NY and London: Cornell University Press, 1992.
- Daniélou, Jean. "Les douze Apôtres, et le zodiaque." *Vigiliae Christianae* 13 (1959): 14–21.
- Dawson, David. *Christian Figural Reading and the Fashioning of Identity*. Berkeley: University of California Press, 2001.
- "Figure, Allegory." In *Augustine Through the Ages: An Encyclopedia*. Edited by Allan D. Fitzgerald, 366–8. Grand Rapids, MI and Cambridge: William B. Eerdmans Publishing, 1999.
- "Transcendence as Embodiment: Augustine's Domestication of Gnosis." *Modern Theology* 10:1 (1994): 1–26.
- Day, John. *God's Conflict with the Dragon and the Sea: Echoes of a Canaanite Myth in the Old Testament*. Cambridge and New York: Cambridge University Press, 1985.
- Yahweh and the Gods and Goddesses of Canaan*. Sheffield: Sheffield Academic Press, 2000.
- Debiais, Vincent. "The Poem of Baudri for Countess Adèle: A Starting Point for a Reading of Medieval Latin Ekphrasis." *Viator* 44:1 (2013): 95–106.
- de Blaauw, Sible. "Campanae supra urbem: sull'uso delle campane nella Roma medievale." *Rivista di Storia della Chiesa in Italia* 47:2 (1993): 367–414.
- "Reception and Renovation of Early Christian Churches in Rome, c. 1050–1300." In *Rome Across Time and Space: Cultural Transmission and the Exchange of Ideas c. 500–1400*. Edited by Claudia Bolgia, Rosamond McKitterick, and John Osborne, 151–66. Cambridge: Cambridge University Press, 2011.
- Demus, Otto. *Byzantine Mosaic Decoration: Aspects of Monumental Art in Byzantium*. Boston, MA: Boston Book and Art Shop, 1955.
- Denny-Brown, Andrea. "Personifications Visualized as Women." In *Women and Gender in Medieval Europe: An Encyclopedia*. Edited by Margaret Schaus, 647–50. New York and London: Routledge, 2006.
- Der, Lindsay and Francesca Fernandini, eds. *Archaeology of Entanglement*. London and New York: Routledge, 2016.
- Derolez, Albert. *The Making and Meaning of the Liber Floridus: A Study of the Original*

- Manuscript Ghent, University Library MS 92.*
London: Harvey Miller, 2015.
- Dey, Hendrik. *The Making of Medieval Rome: A New Profile of the City, 400–1420.* Cambridge: Cambridge University Press, 2021.
- Didron, Adolphe Napoléon. *Iconographie Chrétienne. Histoire de Dieu.* Paris: Imprimerie Royale, 1843.
- Dohrn-van Rossum, Gerhard. *History of the Hour: Clocks and Modern Temporal Orders.* Translated by Thomas Dunlap. Chicago and London: University of Chicago Press, 1996.
- D’Onofrio, Mario. *Primavera e nobiltà: la figura di maggio nel Medioevo.* Rome: Gangemi Editore, 2005.
- Dozeman, Thomas B. *Commentary on Exodus.* Grand Rapids, MI and Cambridge: William B. Eerdmans Publishing, 2009.
- Draghi, Andreina. *Gli affreschi dell’Aula gotica del Monastero dei Santi Quattro Coronati: una storia ritrovata.* Milan: Skira, 2006.
- “L’Aula ‘gotica’.” In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.).* Edited by Serena Romano, 137–76. Milan: Jaca Book, 2012.
- “Il calendario nella sala antistante la cappella di San Silvestro.” In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.).* Edited by Serena Romano, 180–90. Milan: Jaca Book, 2012.
- “Il ciclo dei mesi nell’aula gotica dei Santi Quattro Coronati a Roma: considerazioni sull’iconografia del mese di Marzo e sulla Cappella di San Silvestro.” *Bollettino d’Arte* 128 (2004): 19–38.
- “Il ciclo di affreschi rinvenuto nel convento dei SS. Quattro Coronati a Roma: un capitolo inedito della pittura romana del Duecento.” *Rivista dell’Istituto Nazionale d’Archeologia e Storia dell’Arte* 22 (2001): 115–66.
- “Il ciclo di affreschi nel salone gotico del complesso dei SS. Quattro Coronati a Roma.” *Studi Romani* 47 (1999): 442–4.
- “La decorazione della cappella di San Silvestro.” In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.).* Edited by Serena Romano, 191–208. Milan: Jaca Book, 2012.
- Dronke, Peter. *The Spell of Calcidius: Platonic Concepts and Images in the Medieval West.* Impruneta: Sismel, 2008.
- “Thierry of Chartres.” In *A History of Twelfth-Century Western Philosophy.* Edited by Peter Dronke, 358–85. New York and Cambridge: Cambridge University Press, 1992.
- Dunabin, Katherine. *Mosaics of the Greek and Roman World.* Cambridge and New York: Cambridge University Press, 2001.
- Dunlop, Anne. *Painted Palaces: The Rise of Secular Art in Early Renaissance Italy.* University Park: Pennsylvania State University Press, 2009.
- Dykman, Mark. “D’Innocent III à Boniface VIII. Histoire des Conti et des Annibaldi.” *Bulletin de l’Institut Historique Belge de Rome* 45 (1975): 19–208.
- “Riccardo Conti.” In *Dizionario biografico degli Italiani*, 28:466–8. Rome: Istituto della Enciclopedia Italiana, 1983.
- Earl, James W. “Christian Tradition in the Old English Exodus.” *Neuphilologische Mitteilungen* 71:4 (1970): 541–70.
- Eastwood, Bruce. *Ordering the Heavens: Roman Astronomy and Cosmology in the Carolingian Renaissance.* Leiden: Brill, 2007.
- Eco, Umberto. *The Open Work.* Translated by Anna Cancogni. Cambridge, MA: Harvard University Press, 1989.
- “Riflessioni sulle tecniche di citazione nel medioevo.” In *Ideologie e pratiche del reimpiego nell’alto medioevo: 16–21 aprile 1998. Settimane di Studio del Centro Italiano di Studi sull’alto Medioevo* 46. 2 vols. 1:461–84. Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1999.
- Eire, Carlos. *A Very Brief History of Eternity.* Oxford and Princeton, NJ: Princeton University Press, 2010.
- Elliott Gillian B. and Anne Heath, eds. *Art, Architecture, and the Moving Viewer, ca. 300–1500 CE.* Leiden: Brill, 2022.

- Elsner, Jaś. "Cultural Resistance and the Visual Image: The Case of Dura Europos." *Classical Philology* 96:3 (2001): 269–304.
- Imperial Rome and Christian Triumph: *The Art of the Roman Empire AD 100–450*. Oxford and New York: Oxford University Press, 1998.
- Emmerson, Richard K. *Apocalypse Illuminated: The Visual Exegesis of Revelation in Medieval Illustrated Manuscripts*. University Park: Pennsylvania State University Press, 2018.
- Engels, L. J. "Alexander the Great." In *A Dictionary of Medieval Heroes: Characters in Medieval Narrative Traditions and their Afterlife in Literature, Theatre and the Visual Arts*. Edited by Anthony G. Van Melle et al., 15–24. Woodbridge and Rochester, NY: Boydell Press, 1998.
- Esmeijer, Anna C. *Divina Quaternitas: A Preliminary Study in the Method and Application of Visual Exegesis*. Amsterdam: Van Gorcum Assen, 1978.
- Esposito, Daniela. "Insedimenti baronali e complessi familiari nel medioevo a Roma: Torre dei Conti." *Ricerche di Storia dell'Arte* 108 (2012): 48–60.
- Evans, Gillian Rosemary. "The Uncompleted 'Heptateuch' of Thierry of Chartres." *History of Universities* 3 (1983): 1–13.
- Evans, Michael. "Allegorical Women and Practical Men: The Iconography of the Artes Reconsidered." In *Medieval Women*. Edited by Derek Baker, 305–30. Oxford: Blackwell, 1978.
- "Fictive Painting in Twelfth-Century Paris." In *Sight and Insight: Essays in Art and Culture for E. H. Gombrich at 85*. Edited by John Onians, 73–87. London: Phaidon, 1994.
- "The Geometry of the Mind." *Architectural Association Quarterly* 12:4 (1980): 32–55.
- Fábíán, Laura. "The Biblical King Solomon in Representations of Western European Medieval Royalty." In *The Routledge History of Monarchy*. Edited by Elena Woodacre et al., 54–69. New York: Routledge, 2019.
- Fabiny, Tibor. *Figura and Fulfillment: Typology in the Bible, Art and Literature*. Eugene, OR: Wipf and Stock, 2016.
- Fabricius Hansen, Maria. *The Eloquence of Appropriation: Prolegomena to an Understanding of Spolia in Early Christian Rome*. Rome: L'Erma di Bretschneider, 2003.
- Fassler, Margot. *Music in the Medieval West: Western Music in Context*. New York and London: W. W. Norton, 2014.
- The Virgin of Chartres: Making History through Liturgy and the Arts*. New Haven, CT: Yale University Press, 2010.
- Fedele, Pietro. "Sul commercio delle antichità in Roma nel XII secolo." *Archivio della Reale Società Romana di Storia Patria* 32 (1909): 465–70.
- Feeney, Denis. *Caesar's Calendar: Ancient Time and the Beginnings of History*. Berkeley and Los Angeles: University of California Press, 2007.
- Fengler, Christie K. and William A. Stephany. "The Capuan Gate and Pier della Vigna." *Dante Studies* 99 (1981): 145–57.
- Ferrari, Leo Charles. "Augustine and Astrology." *Laval Théologique et Philosophique* 33 (1977): 241–51.
- Ferreiro, Alberto. *Simon Magus in Patristic, Medieval and Early Modern Traditions*. Leiden: Brill, 2005.
- Flint, Valerie Irene Jane. "Honorius Augustodunensis Imago Mundi." *Archives d'Histoire Doctrinale et Littéraire du Moyen Age* 49 (1982): 7–153.
- The Rise of Magic in the Early Middle Ages*. Princeton, NJ: Princeton University Press, 1994.
- Foerster, Richard. *De Aristotelis Quae Feruntur Secretis Secretorum*. Kiel: Schmidt & Klaunig, 1888.
- Forsyth, Ilene H. "Art with History: The Role of Spolia in the Cumulative Work of Art." In *Byzantine East, Latin West: Art-Historical Studies in Honor of Kurt Weitzmann*. Edited by Christopher Moss and Katherine Kiefer, 153–62. Princeton, NJ: Department of Art and Archaeology, Princeton University, 1995.
- Franklin-Brown, Mary. *Reading the World: Encyclopedic Writing in the Scholastic Age*.

- Chicago: University of Chicago Press, 2012.
- Freedman, Paul. *Images of the Medieval Peasant*. Stanford, CA: Stanford University Press, 1999.
- French, Roger. "Astrology in Medical Practice." In *Practical Medicine from Salerno to the Black Death*. Edited by Luis García-Ballester, 30–59. Cambridge: Cambridge University Press, 1994.
- "Foretelling the Future: Arabic Astrology and English Medicine in the Late Twelfth Century." *Isis* 87:3 (1996): 453–80.
- Fricke, Beate. "Artifex and Opifex – The Medieval Artist." In *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*. 2nd edition. Edited by Conrad Rudolph, 45–70. Hoboken: Wiley-Blackwell, 2019.
- Fallen Idols, Risen Saints: Sainte Foy of Conques and the Revival of Monumental Sculpture in Medieval Art*. Translated by Andrew Griebeler. Turnhout: Brepols, 2015.
- "Fallen Idols and Risen Saints: Western Attitudes towards the Worship of Images and the 'Cultura Veterum Deorum'." In *Negating the Image: Case Studies in Iconoclasm*. Edited by Anne McClanan and Jeffrey Johnson, 67–89. Aldershot: Ashgate, 2005.
- Fried, Johannes. *Donation of Constantine and Constitutum Constantini: The Misinterpretation of a Fiction and Its Original Meaning*. Berlin and New York: Walter de Gruyter, 2007.
- Frugoni, Chiara. "Alcune considerazioni in margine agli affreschi." In *Un universo di simboli: gli affreschi della cripta nella cattedrale di Anagni*. Edited by Gioacchino Giammaria, 1–8. Rome: Viella, 2001.
- "Chiesa e lavoro agricolo nei testi e nelle immagini dall'età tardo-antica all'età romana." In *Medioevo rurale: Sulle tracce della civiltà contadina*. Edited by Vito Fumagalli and Gabriella Rossetti, 321–41. Bologna: Il Mulino, 1980.
- "Il ciclo dei mesi nella 'Porta della Pescheria' del Duomo di Modena." In *La Porta della Pescheria nel Duomo di Modena*. Edited by Chiara Frugoni, Monica Chiellini Nari, and Cristina Acidini Luchinat, 13–31. Modena: Franco Cosimo Panini, 1991.
- "La figurazione basso-medioevale dell'Imago mundi." In *"Imago mundi": la conoscenza scientifica nel pensiero basso-medioevale*, 225–69. Todi: Presso l'Accademia Tudertina, 1983.
- I mesi antelamici del Battistero di Parma*. Parma: Battei, 1992.
- Frye, Northrop. *The Great Code: The Bible and Literature*. New York: Harcourt Brace Jovanovich, 1982.
- Furey, Constance M. et al., eds. *Encyclopedia of the Bible and Its Reception*. Berlin and Boston, MA: Walter de Gruyter, 2012.
- Gaborit-Chopin, Danielle. *Avori medievali*. Florence: Museo Nazionale del Bargello, 1988.
- Gajewski, Alexandra. "Émile Mâle's 'L'art religieux du XIII^e siècle en France. Étude sur l'iconographie du moyen âge et sur ses sources d'inspiration', 1898." *Burlington Magazine* 151:1275 (2009): 396–9.
- Galuzzi, Paolo. *Galileo: Images of the Universe from Antiquity to the Telescope*. Florence: Giunti, 2009.
- Gamboni, Dario. *Potential Images: Ambiguity and Indeterminacy in Modern Art*. London: Reaktion Books, 2004.
- Gandolfo, Francesco. "Aggiornamento scientifico." In *Pittura romana del medioevo. Volume 2: Secoli XI–XIV*. Edited by Guglielmo Matthiae. Rome: Palombi, 1988.
- García y García, Antonio. "The Faculties of Law." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 388–408. Cambridge: Cambridge University Press, 1992.
- Gardner, Julian. "The Cardinals' Music: Musical Interests at the Papal Curia ca. 1200–1304." *Early Music History* 34 (2015): 97–132.
- The Roman Crucible: The Artistic Patronage of the Papacy 1198–1304*. Munich: Hirmer, 2013.
- Gell, Alfred. *The Anthropology of Time: Cultural Constructions of Temporal Maps and Images*. New York: Bloomsbury Academic, 1992.

- Genette, Gérard. *Figures of Literary Discourse*. Translated by Alan Sheridan. New York: Columbia University Press, 1982.
- *Narrative Discourse: An Essay in Method*. Translated by Jane E. Lewin. Ithaca, NY: Cornell University Press, 1980.
- Giammaria, Gioacchino, ed. *Un universo di simboli: Gli affreschi della cripta nella cattedrale di Anagni*. Rome: Viella, 2001.
- Gibson, Gail McMurray. "The Thread of Life in the Hand of the Virgin." In *Equally in God's Image: Women in the Middle Ages*. Edited by Julia Bolton Holloway, Joan Bechtold, and Constance S. Wright, 46–54. New York: Peter Lang, 1990.
- Gigliozzi, Maria Teresa. *I palazzi del papa: Architettura e ideologia: il Duecento*. Rome: Viella, 2003.
- Gillespie, Michael Allen. *The Theological Origins of Modernity*. Chicago: University of Chicago Press, 2008.
- Glass, Dorothy F. "The Archivolt Sculpture at Sessa Aurunca." *Art Bulletin* 52 (1970): 119–31.
- "Papal Patronage in the Early Twelfth Century: Notes on the Iconography of Cosmatesque Pavements." *Journal of the Warburg and Courtauld Institutes* 32 (1969): 386–90.
- Glick, Thomas F. "Agronomy." In *Medieval Science, Technology and Medicine: An Encyclopedia*. Edited by Thomas Glick, Steven J. Livesey, and Faith Wallis, 10–13. New York: Routledge, 2005.
- Goetz, Hans-Werner. "Der Umgang mit der Geschichte in der lateinischen Weltchronistik des hohen Mittelalters." In *Julius Africanus und die christliche Weltchronik*. Edited by Martin Wallraff, 179–205. Berlin and New York: Walter de Gruyter, 2006.
- Gombrich, Ernst. H. *The Sense of Order: A Study in the Psychology of Decorative Art*. Ithaca, NY: Cornell University Press, 1979.
- *Symbolic Images: Studies in the Art of the Renaissance II*. Chicago: University of Chicago Press, 1972.
- Gomez-Moreno, Carmen, Elizabeth H. Jones, Arthur K. Wheelock Jr., and Millard Meiss. "A Sienese St. Dominic Modernized Twice in the Thirteenth Century." *Art Bulletin* 51:4 (1969): 363–6.
- Goodson, Caroline. *The Rome of Pope Paschal I: Papal Power, Urban Renovation, Church Rebuilding and Relic Translation, 817–824*. Cambridge: Cambridge University Press, 2010.
- Goodson, Caroline J. and Janet L. Nelson. "Review Article: The Roman Contexts of the 'Donation of Constantine'." *Early Medieval Europe* 18:4 (2010): 446–67.
- Götze, Oliver. *Der öffentliche Kosmos: Kunst und wissenschaftliches Ambiente in italienischen Städten des Mittelalters und der Renaissance*. Munich: Utz, 2010.
- Grabar, André. "La mēr céleste dans l'iconographie carolingienne et romane." *Bulletin de la Société Nationale des Antiquaires de France* (1957): 98–100.
- Grabes, Herbert. *The Mutable Glass: Mirror-Imagery in Titles and Texts of the Middle Ages and English Renaissance*. Cambridge: Cambridge University Press, 1982.
- Grabmann, Martin. *I papi del Duecento e l'Aristotelismo: I divieti ecclesiastici di Aristotele sotto Innocenzo III e Gregorio IX*. Miscellanea Historiae Pontificae 7. Rome: Pontificia Università Gregoriana, 1941.
- Graefe, Friedrich. *Die publizistik in der letzten epoche kaiser Friedrichs II. Ein beitrage zur geschichte der jahre 1239–1250*. Heidelberg: C. Winter, 1909.
- Grafton, Anthony, Glenn W. Most, and Salvatore Settis. *The Classical Tradition*. Cambridge, MA and London: Harvard University Press, 2010.
- Gramaccini, Norberto. "Antike Statuen auf mittelalterlichen Plätzen." In *Stadtgestalt und Öffentlichkeit. Die Entstehung politischer Räume in der Stadt der Vormoderne*. Edited by Stephan Albrecht, 275–86. Weimar and Vienna: Böhlau Verlag, 2010.
- *Mirabilia: Das Nachleben antiker Statuen vor der Renaissance*. Mainz: P. von Zabern, 1996.
- "La prima riedificazione del Campidoglio e la rivoluzione senatoriale del 1144." In *Roma — centro ideale della cultura*

- dell'Antico. Edited by Silvia Danesi Squarzina, 21–33. Milan: Electa, 1989.
- Grau, Oliver. *Virtual Art: From Illusion to Immersion*. Translated by Gloria Custance. Cambridge, MA and London: MIT Press, 2003.
- Green, Rosalie B. "Virtues and Vices in the Chapter House Vestibule in Salisbury." *Journal of the Warburg and Courtauld Institutes* 31 (1968): 148–58.
- Greenhouse, Carol. *A Moment's Notice: Time Politics across Culture*. Ithaca, NY: Cornell University Press, 1996.
- Grierson, Philip. *The Coins of Medieval Europe*. London: Seaby, 1991.
- Grodecki, Louis and Catherine Brisac. *Gothic Stained Glass, 1200–1300*. Ithaca, NY: Cornell University Press, 1985.
- Gruman, Gerald J. "A History of Ideas about the Prolongation of Life: The Evolution of Prolongevity Hypotheses to 1800." *Transactions of the American Philosophical Society* 56:9 (1966): 1–102.
- Guerrini, Roberto. *Sotto il duomo di Siena: scoperte archeologiche, architettoniche e figurative*. Cinisello Balsamo: Silvana, 2003.
- Guldan, Ernst. *Eva und Maria: eine Antithese als Bildmotiv*. Graz and Cologne: H. Böhlau, 1966.
- Gundel, Hans Georg. *Zodiakos: Tierkreisbilder im Altertum: kosmische Bezug und Jenseitsvorstellungen in antiken Alltagsleben*. Mainz: P. von Zabern, 1992.
- Gunkel, Hermann. *Creation and Chaos in the Primeval Era and the Eschaton: A Religio-Historical Study of Genesis 1 and Revelation 12*. Translated by William Whitney, Jr. Grand Rapids, MI: William B. Eerdmans Publishing, 2006.
- Gutas, Dmitri. *Greek Thought, Arabic Culture*. New York: Routledge, 1998.
- Hachlili, Rachel. *Ancient Mosaic Pavements: Themes, Issues and Trends*. Leiden and Boston, MA: Brill, 2009.
- Hackett, Jeremiah. "Roger Bacon on *Scientia Experimentalis*." In *Roger Bacon and the Sciences*. Edited by Jeremiah Hackett, 277–316. Leiden: Brill, 1997.
- Haefeli-Sonin, Zuzana. *Auftraggeber und Entwurfskonzept im zwiefaltener Martyrolog des 12. Jahrhunderts*. Bern: Peter Lang, 1992.
- Haffner, Mechthild. *Ein antiker Sternbilderzyklus und seine Tradierung in Handschriften vom frühen Mittelalter bis zum Humanismus, Untersuchungen zu den Illustrationen der "Aratea" des Germanicus*. Hildesheim: Georg Olms, 1997.
- Halonen, Marko. "Complex Tools for Complex Time: Solar, Stellar, and Lunar Cycles of Time in Medieval Roman Calendars." In *Time in the Eternal City: Perceiving and Controlling Time in Late Medieval and Renaissance Rome*. Edited by Tuomas Heikkilä, 275–314. Leiden and Boston, MA: Brill, 2021.
- Hamburger, Jeffrey F. "'Haec Figura Demonstrant': Diagrams in an Early Thirteenth-Century Parisian Copy of Lothar de Segni's 'De Missarum Mysteriis'." *Wiener Jahrbuch für Kunstgeschichte* 58 (2009): 7–76.
- "The Iconicity of Script." *Word & Image* 27:3 (2011): 249–61.
- Hamburger, Jeffrey F., David J. Roxburgh, and Linda Safran. *The Diagram as Paradigm: Cross-Cultural Approaches*. Washington, DC: Dumbarton Oaks Research Library and Collection, 2022.
- Hampe, Karl. "Eine Schilderung des Sommeraufenthaltes der römischen Kurie unter Innocenz III in Subiaco 1202." *Historische Vierteljahrschrift* 8 (1905): 509–35.
- Hand, Robert S. "The Use of Military Astrology in Late Medieval Italy: The Textual Evidence." PhD diss., Catholic University of America, 2014.
- Hannah, Robert, Giulio Magli, and Antonella Palmieri. "Nero's 'Solar' Kingship and the Architecture of the Domus Aurea." *NVMEN: International Review for the History of Religions* 63:5–6 (2016): 511–24.
- Hansen, Dorothee. *Das Bild des Ordenslehrers und die Allegorie des Wissens: Ein gemaltes Programm der Augustiner*. Berlin: Akademie Verlag, 1995.

- Hanson, R. P. C. *The Search for the Christian Doctrine of God: The Arian Controversy 318–381*. Edinburgh: T&T Clark, 1988.
- Harnischfeger, Ernst. *Die Bamberger Apokalypse*. Stuttgart: Urachhaus, 1981.
- Haskins, Charles Homer. "Michael Scot and Frederick II." *Isis* 4:2 (1921): 250–75.
- Hautecoeur, Louis. "Soleil et la lune dans les crucifixions." *Revue Archéologique* 5:14 (1921): 13–32.
- Heffernan, James A. W. *Museum of Words: The Poetics of Ekphrasis from Homer to Ashbery*. Chicago: University of Chicago Press, 1993.
- Heikkilä, Tuomas. "Time and the Eternal City." In *Time in the Eternal City: Perceiving and Controlling Time in Late Medieval and Renaissance Rome*. Edited by Tuomas Heikkilä, 1–14. Leiden and Boston, MA: Brill, 2021.
- Helffenstein, Iris. *Wissenstransfer in Bildprogrammen des Trecento: Allegorie, Imitation und Medialität*. Paderborn: Brill and Wilhelm Fink, 2021.
- Heller, Emmy. "Zur Frage des kurialen Stileinflusses in der sizilischen Kanzlei Friedrichs II." *Deutsches Archiv für Erforschung des Mittelalters* 19 (1963): 434–50.
- Heller-Roazen, Daniel. *The Fifth Hammer: Pythagoras and the Disharmony of the World*. New York: Zone Books, 2011.
- Fortune's Faces: *The Roman de la Rose and the Poetics of Contingency*. Baltimore: Johns Hopkins University Press, 2003.
- Hendrix, Scott E. *How Albert the Great's Speculum astronomiae Was Interpreted and Used by Four Centuries of Readers: A Study in Late Medieval Medicine, Astronomy, and Astrology*. Lewiston: Edwin Mellen Press, 2010.
- "Reading the Future and Freeing the Will: Astrology of the Arabic World and Albertus Magnus." *Hortulus* 1 (2006): 30–49.
- Henisch, Bridget Ann. *The Medieval Calendar Year*. University Park: Penn State University Press, 1999.
- Hennigsen, Jürgen. "Enzyklopädie: Zur Sprach- und Bedeutungsgeschichte eine pädagogischen Begriffs." *Archiv für Begriffsgeschichte* 10 (1966): 271–362.
- Herde, Peter. "Literary Activities of the Imperial and Papal Chanceries during the Struggle between Frederick II and the Papacy." In *Intellectual Life at the Court of Frederick II Hohenstaufen*. Edited by William Tronzo, 227–39. New Haven, CT: Yale University Press, 1994.
- Herklotz, Ingo. "Die Beratungsräume Calixtus' II. im Lateranpalast und ihre Fresken: Kunst und Propaganda am Ende des Investiturestreits." *Zeitschrift für Kunstgeschichte* 52:2 (1989): 145–214.
- "Der Campus Lateranensis im Mittelalter." *Römisches Jahrbuch für Kunstgeschichte* 22 (1985): 3–43.
- Gli eredi di Costantino: il papato, il Laterano e la propaganda visiva nel XII secolo*. Rome: Viella, 2000.
- "Der mittelalterliche Fassadenportikus der Lateranbasilika und seine Mosaiken. Kunst und Propaganda am Ende des 12. Jahrhunderts." *Römisches Jahrbuch für Kunstgeschichte* 25 (1989): 25–95.
- Herrlinger, Robert. *History of Medical Illustration, from Antiquity to AD 1600*. London: Pitman Medical, 1970.
- Herzman, Ronald B. and William A. Stephany. "Dante and the Frescoes at Santi Quattro Coronati." *Speculum* 87:1 (2012): 95–146.
- Hicks, Andrew. "Martianus Capella and the Liberal Arts." In *The Oxford Handbook of Medieval Latin Literature*. Edited by Ralph Hexter and David Townsend, 307–34. Oxford: Oxford University Press, 2012.
- Hilhorst, Antonius. "The Heavenly Palace in the Acts of Thomas." In *The Apocryphal Acts of Thomas*. Edited by Jan N. Bremmer, 53–64. Leuven: Peeters, 2001.
- Hippocrates. *Ancient Medicine. Airs, Waters, Places. Epidemics 1 and 3. The Oath. Precepts. Nutriment*. Translated by W. H. S. Jones. Loeb Classical Library 147. Cambridge, MA: Harvard University Press, 1923.
- Hodder, Ian. *Entangled: An Archaeology of the Relationships between Humans and Things*. Oxford: Wiley-Blackwell, 2012.

- Hodne, Lasse. "The 'Double Apostolate' as an Image of the Church. A Study of Early Medieval Apse Mosaic in Rome." *Acta ad Archaeologiam et Artium Historiam Pertinentia* 20:6 (2007): 143–62.
- Hoffman, Eva R. "Pathways of Portability: Islamic and Christian Interchange from the Tenth to the Twelfth Century." *Art History* 24:1 (2001): 17–50.
- Hollander, John. "The Poetics of Ekphrasis." *Word & Image* 4 (1988): 209–19.
- Houben, Hubert. "Federico II come settima testa del drago apocalittico." In *Il Ricordo del Futuro. Gioachino da Fiore e il Gioachinismo attraverso la storia*. Edited by Fabio Troncarelli, 75–9. Bari: Adda, 2006.
- Hourihane, Colum, ed. *Time in the Medieval World: Occupations of the Months and Signs of the Zodiac in the Index of Christian Art*. Princeton, NJ: Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2007.
- Hübner, Wolfgang. "Eine unbeachtete zodiakale Melothese bei Vettius Valens." *Rheinisches Museum für Philologie* 120:3–4 (1977): 247–54.
- Hugenholtz, Frederik W. N. "The Anagni Frescoes: A Manifesto." *Mededeelingen van het Nederlands Instituut te Rome* 41 (1979): 139–72.
- Hugh of Saint Victor. *The Didascalicon of Hugh of Saint Victor: A Medieval Guide to the Arts*. Translated from the Latin with introduction and commentary by Jerome Taylor. New York: Columbia University Press, 1991.
- Huillard-Breholles, J. *Diplomatica Friderici Secundi*. Paris: Pion, 1857.
- Hult, David F. "Language and Dismemberment: Abelard, Origen, and the Roman de la Rose." In *Rethinking the Romance of the Rose*. Edited by Kevin Brownlee and Sylvia Huot, 101–30. Philadelphia: University of Pennsylvania Press, 1992.
- Humphreys, R. Stephen. *From Saladin to the Mongols: The Ayyubids of Damascus, 1193–1260*. Albany: State University of New York Press, 1977.
- Huntsman, Jeffrey F. "Grammar." In *The Seven Liberal Arts in the Middle Ages*. Edited by David L. Wagner, 58–95. Bloomington: Indiana University Press, 1986.
- Ilari, Annibale. "Il calendario murale di Santa Maria 'de Aventino'. Preliminari di ricerca." In *Piranesi e l'Aventino*. Edited by Barbara Jatta, 27–48. Milan: Electa, 1998.
- Irtgenkauf, Wolfgang. *Das staufische Jahr. Die Jahresminiatur aus der Zwielfalter Handschrift Cod. hist. fol. 415 der Württembergischen Landesbibliothek Stuttgart*. Stuttgart: Württembergische Bibliotheksgesellschaft, 1976.
- Isidore of Seville. *The Etymologies of Isidore of Seville*. Edited by Stephen A. Barney. Cambridge and New York: Cambridge University Press, 2006.
- Israel, Uwe. "Der Papst und die Urkunde an der Wand: Innozenz III (1198–1216) in Subiaco." *Quellen und Forschungen aus Italienischen Archiven und Bibliotheken* 84 (2004): 69–102.
- Izbicki, Thomas M. "Dominic, Saint (c. 1170–1221)." In *Key Figures in Medieval Europe: An Encyclopedia*. Edited by Richard Kenneth Emmerson and Sandra Clayton-Emmerson, 176–8. New York: Routledge, 2006.
- Jacquart, Danielle. "De crasis à complexio: Note sur le vocabulaire du tempérament en latin medieval." In *La science médicale occidentale entre deux renaissances (XIIe s.–XVe s.)*, 71–6. Aldershot: Variorum, 1997.
- James, Liz. *Light and Colour in Byzantine Art*. London: Clarendon Press, 1996.
- "Senses and Sensibility in Byzantium." *Art History* 27:4 (2004): 522–37.
- Jeauneau, Édouard. *Rethinking the School of Chartres*. Toronto: University of Toronto Press, 2009.
- Jeffrey, David Lyle, ed. *Dictionary of Biblical Tradition in English Literature*. Grand Rapids, MI: William B. Eerdmans Publishing, 1992.
- Jensen, Robin M. *Baptismal Imagery in Early Christianity: Ritual, Visual, and Theological*

- Dimensions*. Grand Rapids, MI: Baker Academic, 2012.
- "The Femininity of Christ in Early Christian Iconography." *Studia Patristica* 29 (1996): 269–82.
- "Joh. Chrysostomus: Homilie bei Übertragung von Märtyrerreliquien." In *Texte der Kirchenväter*. Edited by Alfons Heilmann, 4:426–8. Munich: Kösel-Verlag, 1964.
- Living Water: Images, Symbols, and Settings of Early Christian Baptism*. Leiden and Boston, MA: Brill, 2011.
- "What Are Pagan River Gods Doing in Scenes of Jesus' Baptism." *Bible Review* 9:1 (1993): 34–41.
- John of Salisbury. *The Metalogicon: A Twelfth-Century Defense of the Verbal and Logical Arts of the Trivium*. Translated with an introduction and notes by Daniel D. McGarry. Philadelphia: Paul Dry Books, 2009.
- Jolivet, Jean. "The Arabic Inheritance." In *A History of Twelfth-Century Western Philosophy*. Edited by Peter Dronke, 113–48. New York: Cambridge University Press, 1988.
- "Elements pour une étude des rapports entre la grammaire et l'ontologie au Moyen Age." In *Sprache und Erkenntnis im Mittelalter*. Edited by A. Zimmermann, 135–64. Berlin and New York: Walter de Gruyter, 1981.
- Jolly, Penny Howell. *Made in God's Image? Eve and Adam in the Genesis Mosaics at San Marco, Venice*. Berkeley and Los Angeles: University of California Press, 1997.
- Jones, Ann Rosalind and Peter Stallybrass. *Renaissance Clothing and the Materials of Memory*. Cambridge and New York: Cambridge University Press, 2000.
- Jones, Malcolm. "Folklore Motifs in Late Medieval Art II: Sexist Satire and Popular Punishments." *Folklore* 101:1 (1990): 69–87.
- Jones, Nathaniel B. *Painting, Ethics, and Aesthetics in Rome*. Cambridge: Cambridge University Press, 2019.
- "Starting from Places: Continuous Narration and Discontinuous Perspectives in Roman Art." *Art Bulletin* 100:1 (2018): 7–35.
- Joyner, Danielle. *Painting the Hortus Deliciarum: Medieval Women, Wisdom, and Time*. University Park: Pennsylvania State University Press, 2016.
- Julian, *Orations 1–5*. Translated by Wilmer C. Wright. Loeb Classical Library 13. Cambridge, MA: Harvard University Press, 1989.
- Kantorowicz, Ernst Hartwig. *Frederick the Second, 1194–1250*. New York: R. R. Smith, 1931.
- The King's Two Bodies: A Study in Mediaeval Political Ideology*. Princeton, NJ: Princeton University Press, 1997 [1957].
- "Oriens Augusti. Lever du Roi." *Dumbarton Oaks Papers* 17 (1963): 117–77.
- Kärcher, Katrin. "Der 'dunkle Zwilling' im Stundenbuch des Duc de Berry: Überlegungen zu einer Körperdoppelung." In *Bild und Körper im Mittelalter*. Edited by Kristin Marek and Raphaële Preisinger, 165–83. Paderborn: Fink, 2006.
- Katzenellenbogen, Adolf. *Allegories of the Virtues and Vices in Mediaeval Art from Early Christian Times to the Thirteenth Century*. London: Warburg Institute, 1939.
- "The Representation of the Seven Liberal Arts." In *Twelfth-Century Europe and the Foundations of Modern Society*. Edited by Marshall Clagett, 39–55. Madison: University of Wisconsin Press, 1961.
- The Sculptural Programs of Chartres Cathedral*. Baltimore: Johns Hopkins University Press, 1959.
- Kaufmann, Claus M. "The Iconography of the Judgment of Solomon in the Middle Ages." In *Tributes to Jonathan J. G. Alexander: The Making and Meaning of Illuminated Medieval and Renaissance Manuscripts, Art and Architecture*. Edited by Susan L'Engle and Gerald B. Guest, 297–306. London: Harvey Miller, 2006.
- Kaye, Joel. *A History of Balance, 1250–1375: The Emergence of a New Model of Equilibrium and Its Impact on Thought*. Cambridge: Cambridge University Press, 2014.
- Kedar, Benjamin Z. "Religion in Catholic–Muslim Correspondence and Treaties."

- In *Diplomatics in the Eastern Mediterranean 1000–1500: Aspects of Cross-Cultural Communication*. Edited by Alexander D. Beihammer, Maria G. Parani, and Christopher D. Schnabel, 407–22. Leiden and Boston, MA: Brill, 2008.
- Kelly, J. N. D. and Michael J. Walsh. *A Dictionary of Popes*. 2nd edition. Oxford: Oxford University Press, 2012.
- Kelly, Samantha. *The New Solomon: Robert of Naples (1309–1343) and Fourteenth-Century Kingship*. Leiden: Brill, 2003.
- Kendrick, Laura. *Animating the Letter: The Figurative Embodiment of Writing from Late Antiquity to the Renaissance*. Columbus: Ohio State University Press, 1999.
- Kenny, Anthony. *Aquinas on Mind*. London and New York: Routledge, 1993.
- Kessler, Clemencia Hand. “A Problematic Illumination of the Heidelberg *Liber Scivias*.” *Marsyas* 8 (1959): 7–21.
- Kessler, Herbert L. “‘Caput et speculum omnium ecclesiarum’: Old St. Peter’s and Church Decoration in Medieval Latium.” In *Italian Church Decoration of the Middle Ages and Early Renaissance: Functions, Forms, and Regional Traditions*. Edited by William Tronzo, 121–45. Bologna: Nuova Alfa Editoriale, 1989.
- “Evil Eye(ing): Romanesque Art as a Shield of Faith.” In *Romanesque Art and Thought in the Twelfth Century: Essays in Honor of Walter Cahn*. Edited by Colum Hourihane, 107–35. Princeton, NJ: Index of Christian Art, Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2008.
- Experiencing Medieval Art*. Toronto: University of Toronto Press, 2019.
- “Fenestra obliqua: Art and Peter of Limoges’s Modes of Seeing.” In *Optics, Ethics, and Art in the Thirteenth and Fourteenth Centuries: Looking into Peter of Limoges’s Moral Treatise on the Eye*. Edited by Herbert L. Kessler and Richard G. Newhauser, 140–58. Toronto: Pontifical Institute of Medieval Studies, 2018.
- “The French Connection: Word and Image on the Rosano Cross.” In *La pittura su tavola nel XII secolo. Riconsiderazioni e nuove acquisizioni a seguito del restauro della Croce di Rosano*. Edited by Cecilia Frosinini, Alessio Monciatti, and Gerhard Wolf, 133–40. Florence: EDIFIR, 2012.
- “Inscriptions on Painted Crosses and the Spaces of Personal and Communal Meditation.” *Acta ad Archaeologiam et Artium Historiam Pertinentia* NS 24:10 (2011): 161–84.
- “Joseph in Siena.” In *Joseph of Nazareth through the Centuries*. Edited by Joseph F. Chorpennig, 63–76. Philadelphia: St. Joseph’s University Press, 2011.
- Neither God Nor Man: Words, Images, and the Medieval Anxiety about Art*. Freiburg im Breisgau: Rombach Verlag, 2007.
- Old St. Peter’s and Church Decoration in Medieval Italy*. Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 2002.
- “The Oratory of Thomas Becket in Anagni.” In *Old St. Peter’s and Church Decoration in Medieval Italy*. Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 2002.
- “Speculum.” *Speculum* 86 (2011): 1–41.
- “Storie sacre e spazi consacrati: la pittura narrativa nelle chiese medievali (sec. IV–XII).” In *L’arte medievale nel contesto. Iconografia, funzioni, tecniche*. Edited by Paolo Piva, 275–302. Milan: Jaca Book, 2006.
- “‘To Curb the License of Painters’: The Functions of Some Captions in the Construction and Understanding of Pictured Narratives.” In *Figura e racconto. Narrazione letteraria e narrazione figurativa in Italia dall’Antichità al primo Rinascimento. Proceedings of the conference, Université de Lausanne, 25–26 November 2005*. Edited by Gabriele Bucchini, Ivan Foletti, Marco Praloran, and Serena Romano, 25–52. Florence: Sismel, 2009.
- Kibre, Pearl. “Astronomia or Astrologia Ypocratis.” *Studia Copernicana* 16 (1977): 133–56.
- Hippocrates Latinus: Repertorium of Hippocratic Writings in the Latin Middle Ages*. Revised

- edition. New York: Fordham University Press, 1985.
- Kim, Anna Marazuela. "Painting the Eternal': Micromosaic Materiality and Transubstantiation in an Icon of Christ at Santa Croce in Gerusalemme, Rome." In *Almost Eternal: Painting on Stone and Material Innovation in Early Modern Europe*. Edited by Piers Baker-Bates and Elena Calvillo, 273–98. Leiden and Boston, MA: Brill, 2018.
- Kinney, Dale. "Ancient Gems in the Middle Ages: Riches and Readymades." In *Reuse Value: Spolia and Appropriation in Art and Architecture from Constantine to Sherrie Levine*. Edited by Richard Brilliant and Dale Kinney, 97–120. Burlington, VT: Ashgate, 2011.
- "The Concept of *Spolia*." In *A Companion to Medieval Art: Romanesque and Gothic in Medieval Europe*. 2nd edition. Edited by Conrad Rudolph, 346–56. Chichester: Blackwell, 2019.
- "Found Iconography." In *The Lives and Afterlives of Medieval Iconography*. Edited by Pamela M. Patton, 9–32. University Park: Pennsylvania State University Press, 2021.
- "The Horse, the King and the Cuckoo: Medieval Narrations of the Statue of Marcus Aurelius." *Word & Image* 18:4 (2002): 372–98.
- "Interpretatio Christiana." In *Maxima debetur magistro reverentia. Essays on Rome and the Roman Tradition in Honor of Russell T. Scott*. Edited by P. B. Harvey Jr. and C. Conybeare, 117–25. Como: New Press Edizioni, 2009.
- Kircher, Athanasius. *Phonurgia nova sive conjugium mechanico-physicum artis & naturae paronymia phonosophia concinnatum*. Kempten: Rudolph Dreherr, 1673.
- Klauser, Theodor. "Ein Kirchenkalender aus der römischen Titelkirche der heiligen Vier Gekrönten." *Gesammelte Arbeiten zur Liturgiegeschichte, Kirchengeschichte und christlichen Archäologie*. Jahrbuch für Antike und Christentum 3. Edited by Ernst Dassmann, 46–70. Münster: Aschendorff, 1974.
- Klein, Peter. "Medieval Apocalypse Cycles and Eschatological Expectations: The So-Called 'Terrors' of the Year 1000." In *L'Apocalisse nel Medioevo*. Edited by Rossana E. Guglielmetti, 265–301. Florence: Sismel, 2012.
- Klemm, Elisabeth. "Artes liberales und antike Autoren in der Aldersbacher Sammelhandschrift Clm 2599." *Zeitschrift für Kunstgeschichte* 41 (1978): 1–15.
- "Die Regensburger Buchmalerei des 12. Jahrhunderts." In *Regensburger Buchmalerei von frühkarolingischer Zeit bis zum Ausgang des Mittelalters*, 39–58. Munich: Bayerische Staatsbibliothek, 1987.
- Klibansky, Raymond. "The School of Chartres." In *Twelfth-Century Europe and the Foundations of Modern Society*. Edited by Marshall Clagett, 3–14. Madison: University of Wisconsin Press, 1961.
- Klibansky, Raymond, Erwin Panofsky, and Fritz Saxl. *Saturn and Melancholy: Studies in the History of Natural Philosophy, Religion, and Art*. London: Nelson, 1964.
- Koerner, Joseph Leo. "The Mortification of the Image: Death as a Hermeneutic in Hans Baldung Grien." *Representations* 10 (1985): 52–101.
- König, Jason and Greg Wolf. *Encyclopaedism from Antiquity to the Renaissance*. Cambridge and New York: Cambridge University Press, 2013.
- Kracauer, Siegfried. "Time and History." *History and Theory* 6:6 (1966): 65–78.
- Krautheimer, Richard. *Rome: Profile of a City, 312–1308*. Princeton, NJ: Princeton University Press, 1980.
- Krautheimer-Hess, Trude. "The Original Porta dei Mesi at Ferrara and the Art of Niccolo." *Art Bulletin* 26 (1944): 152–74.
- Kripke, Saul A. *Naming and Necessity*. Cambridge, MA: Harvard University Press, 1980.
- Kroos, Renate. "Liturgische Quellen zum Bamberger Dom." In *Der Dom in Bamberg*. Edited by Dethard von Winterfeld, 160–76. Berlin: Mann, 1979.
- Krug, Antje. "Antike Gemmen und das Zeitalter Bernwards." In *Bernward von Hildesheim und*

- das Zeitalter der Ottonen: Katalog der Ausstellung Hildesheim 1993. Edited by Michael Brandt and Arne Eggebrecht, 1:161–72. Hildesheim: Bernward Verlag, 1993.
- Krüger, Klaus. *Der frühe Bildkult des Franziskus in Italien: Gestalt und Funktionswandel des Tafelbildes im 13. und 14. Jahrhundert*. Berlin: Mann, 1992.
- “Un santo da guardare: l’immagine di San Francesco nelle tavole del Duecento.” In *Francesco d’Assisi e il primo secolo di storia francescana*. Edited by Maria Pia Alberzoni, 145–61. Turin: Einaudi, 1997.
- Kugel, James L. and Rowan A. Greer. *Early Biblical Interpretation*. Philadelphia: Westminster Press, 1986.
- Kühnel, Bianca. *The End of Time in the Order of Things: Science and Eschatology in Early Medieval Art*. Regensburg: Schnell & Steiner, 2003.
- “The Perception of History in Thirteenth-Century Crusader Art.” In *France and the Holy Land: Frankish Culture at the End of the Crusades*. Edited by Daniel H. Weiss and Lisa Mahoney, 161–86. Baltimore: Johns Hopkins University Press, 2004.
- Kumler, Aden. *Translating Truth: Ambitious Images and Religious Knowledge in Late Medieval France and England*. New Haven, CT: Yale University Press, 2011.
- Kupfer, Marcia. *Art and Optics in the Hereford World Map*. New Haven, CT: Yale University Press, 2016.
- “Reflections in the Ebstorf Map: Cartography, Theology, and *Dilectio speculationis*.” In *Mapping Medieval Geographies: Geographical Encounters in the Latin West and Beyond, 300–1600*, 100–26. New York: Cambridge University Press, 2014.
- Kupfer, Marcia, Adam S. Cohen, and J. H. Chajes, eds. *The Visualization of Knowledge in Medieval and Early Modern Europe. Studies in the Visual Cultures of the Middle Ages (SVCMA)*. Turnhout: Brepols, 2020.
- Ladis, Andrew. *Giotto’s O: Narrative, Figuration, and Pictorial Ingenuity in the Arena Chapel*. University Park: Pennsylvania State University Press, 2008.
- Ladner, Gerhart B. “I mosaici e gli affreschi ecclesiastico-politici nell’antico Palazzo Lateranense.” *Rivista di Archeologia Cristiana* 12 (1935): 265–92.
- Laistner, M. L. W. “The Western Church and Astrology during the Early Middle Ages.” *Harvard Theological Review* 34 (1941): 251–75.
- Lasko, Peter. *Ars Sacra, 800–1200*. 2nd edition. New Haven, CT: Yale University Press, 1994.
- Lautier, Claudine. “Les vitraux du chevet de la cathédrale de Laon: Première approche.” *Österreichische Zeitschrift für Kunst und Denkmalpflege* 54:3–4 (2000): 257–64.
- Lavin, Marilyn Aronberg. *The Place of Narrative: Mural Decoration in Italian Churches, 431–1600*. Chicago: University of Chicago Press, 1994.
- Law, Helen H. “Croesus: From Herodotus to Boccaccio.” *The Classical Journal* 43:8 (1948): 456–62.
- Leclercq, Jean. *The Love of Learning and Desire for God*. Translated by Catharine Misrahi. New York: Fordham University Press, 1982.
- Leff, Gordon. “The Trivium and the Three Philosophies.” In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 307–36. Cambridge: Cambridge University Press, 1992.
- Leftow, Brian. *Time and Eternity*. Ithaca, NY and London: Cornell University Press, 1991.
- Le Goff, Jacques. “Calendario.” In *Enciclopedia Einaudi*, 2:501–34. Turin: Einaudi, 1977.
- “Pourquoi le XIII^e siècle a-t-il été plus particulièrement un siècle d’encyclopédisme?” *L’enciclopedia medievale*. Edited by Michelangelo Picone, 23–40. Ravenna: Longo Editore, 1994.
- Time, Work, and Culture in the Middle Ages*. Translated by Arthur Goldhammer. Chicago and London: University of Chicago Press, 1980.
- Lehmann, Karl. “The Dome of Heaven.” *The Art Bulletin* 27 (1945): 1–27.
- Lemay, Helen Rodnite. “Science and Theology at Chartres: The Case of the Supracestrial

- Waters." *British Journal for the History of Science* 10:3 (1977): 226–36.
- Lemay, Richard. *Abu Ma'shar and Latin Aristotelianism in the Twelfth Century: The Recovery of Aristotle's Natural Philosophy through Arabic Astrology*. Beirut: American University of Beirut, 1962.
- "The True Place of Astrology in Medieval Science and Philosophy: Towards a Definition." In *Astrology, Science and Society: Historical Essays*. Edited by Patrick Curry, 57–73. Woodbridge: Boydell Press, 1987.
- Lepage, Jean-Denis G. G. *Castles and Fortified Cities of Medieval Europe: An Illustrated History*. Jefferson, NC: McFarland and Company, 2002.
- Le Pogam, Pierre-Yves. *De la "Cit  de Dieu" au "Palais du Pape": Les r sidences pontificales dans la seconde moiti  du XIIIe si cle (1254–1304)*. Rome:  cole Fran aise de Rome, 2005.
- Lerner, Robert E. "Frederick II, Alive, Aloft, and Allayed in Franciscan-Joachite Eschatology." In *The Use and Abuse of Eschatology in the Middle Ages*. Edited by W. Verbeke, 359–84. Leuven: Leuven University Press, 1988.
- Levi, Doro. "Aion." *Hesperia* 13 (1944): 269–314.
- Lewis, Suzanne. *The Art of Matthew Paris in the Chronica majora*. Berkeley: University of California Press, 1987.
- "Narrative." In *A Companion to Medieval Art: Romanesque and Gothic in Northern Europe*. Edited by Conrad Rudolph, 86–105. Oxford and Malden, MA: Blackwell, 2006.
- Lewry, P. Osmund. "Papal Ideals and the University of Paris, 1170–1303." In *The Religious Roles of the Papacy: Ideals and Realities, 1150–1300*. Edited by Christopher Ryan, 363–88. Toronto: Pontifical Institute of Medieval Studies, 1989.
- Lindberg, David C. *The Beginnings of Western Science*. Chicago: University of Chicago Press, 2007.
- John Pecham and the Science of Optics: Perspectiva communis*. Madison: University of Wisconsin Press, 1970.
- "Lines of Influence in Thirteenth-Century Optics: Bacon, Witelo and Pecham." *Speculum* 46 (1971): 66–83.
- Theories of Vision from al-Kindi to Kepler*. Chicago: University of Chicago Press, 1976.
- "The Transmission of Greek and Arabic Learning to the West." In *Science in the Middle Ages*. Edited by David C. Lindberg, 52–90. Chicago: Chicago University Press, 1978.
- Ling, Lesley and Roger Ling. "Fresco and Other Forms of Wall Painting." In *Making Medieval Art*. Edited by Philip Lindley, 4–29. Donington: Shaun Tyas, 2003.
- Litt, Thomas. *Les corps c leste dans l'univers de Saint Thomas d'Aquin*. Louvain: B. Nauwelaerts, 1963.
- Livesey, Steven J. "Quadrivium." In *Medieval Science, Technology, and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 431–2. New York and London: Routledge, 2005.
- Lloyd, Joan Barclay. SS. *Vincenzo e Anastasio at Tre Fontane Near Rome: History and Architecture of a Medieval Cistercian Abbey*. Kalamazoo, MI: Cistercian Publications, 2006.
- Lorch, Richard. "Archimedes." In *Medieval Science, Technology and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 41–2. New York and London: Routledge, 2005.
- Lotario dei Segni (Pope Innocent III). *De miseria condicionis humane*. Edited by Robert E. Lewis. Athens: University of Georgia Press, 1978.
- Lubac, Henri de. *Corpus Mysticum: L'eucharistie et l' glise au Moyen  ge:  tude historique*. Paris: Aubier, 1944.
- Medieval Exegesis*. Translated by Marc Sebanc. 3 vols. Grand Rapids, MI: William B. Eerdmans Publishing, 1998.
- Luchaire, Achille. "A Realist Ascends the Papal Throne." In *Innocent III: Vicar of Christ or Lord of the World?* Edited by James M. Powell, 19–36. Washington, DC: Catholic University of America Press, 1994.

- Luchitskaja, Svetlana. "The Image of Muhammad in Latin Chronography of the Twelfth and Thirteenth Centuries." *Journal of Medieval History* 26 (2000): 1115–26.
- Luchterhandt, Manfred. "Mirabilia – Die Antiken Roms und ihre mittelalterlichen Betrachter." In *Wunder Roms im Blick des Nordens von der Antike bis zur Gegenwart. Katalog zur Ausstellung im Erzbischöflichen Diözesanmuseum Paderborn*. Edited by Christoph Stiegemann, 90–109. Petersberg: Michael Imhof Verlag, 2017.
- Luhmann, Niklas. *Funktion der Religion*. Frankfurt: Suhrkamp, 1982.
- Lutz, Cora E. "Remigius' Ideas on the Classification of the Liberal Arts." *Traditio* 12 (1956): 65–86.
- Maccagnolo, Enzo. "David of Dinant and the Beginnings of Aristotelianism in Paris." In *A History of Twelfth-Century Western Philosophy*. Edited by Peter Dronke, 429–40. New York and Cambridge: Cambridge University Press, 1992.
- Maccarone, Michele. "Innocenzo III teologo dell' Eucharistia." In *Studi su Innocenzo III*. Italia Sacra: Studi e Documenti di Storia Ecclesiastica 17, 340–431. Padua: Antenore, 1972.
- Maddalo, Silvia. "A proposito di un calendario dipinto a Roma, nel Duecento, e di una committenza cardinalizia." In *Immagine e Ideologia. Studi in onore di Arturo Carlo Quintavalle*. Edited by Arturo Calzona, Roberto Campari, and Massimo Mussini, 302–12. Milan: Electa, 2007.
- "Rappresentare il tempo a Roma nel Duecento: i calendari dipinti tra tradizione laica e riproposta cristiana." In *Medioevo: La Chiesa e il Palazzo*. Edited by Arturo Carlo Quintavalle, 583–97. Milan: Electa, 2007.
- Maddox, Donald. *Structure and Sacring: The Systematic Kingdom in Chretien's Érec et Enide*. Lexington, KY: French Forum, 1978.
- Maguire, Henry. *Earth and Ocean: The Terrestrial World in Early Byzantine Art*. University Park: Pennsylvania State University Press, 1987.
- Maier, Harry O. "Nero in Jewish and Christian Tradition from the First Century to the Reformation." In *A Companion to the Neronian Age*. Edited by Martin T. Dinter and Emma Buckle, 385–404. Chichester: Wiley-Blackwell, 2013.
- Malafouris, Lambros. *How Things Shape the Mind: A Theory of Material Engagement*. Cambridge, MA: MIT Press, 2013.
- Mâle, Émile. *Religious Art in France: The Thirteenth Century. A Study of Medieval Iconography and Its Sources*. Princeton, NJ: Princeton University Press, 1984.
- Maleczek, Werner. "Stefano Conti." In *Dizionario biografico degli Italiani*, 28:475–78. Rome: Istituto della Enciclopedia Italiana, 1983.
- Malina, Debra. *Breaking the Frame: Metalepsis and Construction of the Subject*. Columbus: Ohio State University Press, 2002.
- Mane, Perrine. *Calendriers et techniques agricoles: France–Italie, XIIe–XIIIe siècles*. Paris: Le Sycomore, 1983.
- "Comparaison des thèmes iconographiques des calendriers monumentaux et enluminés en France, aux XIIe et XIIIe s." *Cahiers de Civilisation Médiévale Année* 115 (1986): 257–64.
- Marchiori, Laura. "Art and Reform in Tenth-Century Rome: The Paintings of S. Maria in Pallara." PhD diss., Queens University, 2007.
- "Medieval Wall Painting in the Church of Santa Maria in Pallara, Rome: The Use of Objective Dating Criteria." *Papers of the British School at Rome* 77 (2009): 225–55.
- Markosian, Ned. "Time." In *The Stanford Encyclopaedia of Philosophy* (2002). <https://plato.stanford.edu/entries/time/>, accessed May 7, 2021.
- Markschies, Christoph and Johannes Zachhuber. *Die Welt als Bild: Interdisziplinäre Beiträge zur Visualität von Weltbildern*. Berlin and New York: Walter de Gruyter, 2008.
- Masi, Michael. "A Newberry Diagram of the Liberal Arts." *Gesta* 11:2 (1972): 52–6.
- Master Gregorius. *The Marvels of Rome*. Translated with commentary by John

- Osborne. Toronto: Pontifical Institute of Mediaeval Studies, 1987.
- Matera, Francesca. "Osservazioni sul supporto murario e sul suo stato di conservazione." In *Gli affreschi dell'Aula gotica del Monastero dei Santi Quattro Coronati: una storia ritrovata*. Edited by Andreina Draghi, 363–90. Milan: Skira, 2006.
- Mathews, Thomas. *The Clash of Gods: A Reinterpretation of Early Christian Art*. Princeton, NJ: Princeton University Press, 1999.
- Matthiae, Guglielmo. *Pittura romana del medioevo. Volume 2: Secoli XI–XIV, aggiornamento scientifico e bibliografia di Francesco Gandolfo*. Rome: Palombi, 1988.
- Mazzeschi, Pierangelo. *Un mestiere per ciascuno: il ciclo dei mesi nel Portale Maggiore della Pieve di S. Maria Assunta ad Arezzo*. Florence: Società Editrice Fiorentina, 2010.
- Mazzotta, Guiseppe. *Dante's Vision and the Circle of Knowledge*. Princeton, NJ: Princeton University Press, 1993.
- McCluskey, Stephen C. "Boethius' Astronomy and Cosmology." In *A Companion to Boethius in the Middle Ages*. Edited by Noel Harold Kaylor and Philip Edward Phillips, 47–74. Leiden: Brill, 2012.
- McGinn, Bernard. *Anti-Christ: Two Thousand Years of the Human Fascination with Evil*. New York: Columbia University Press, 1994.
- "John's Apocalypse and the Apocalyptic Mentality." In *The Apocalypse in the Middle Ages*. Edited by Richard K. Emmerson and Bernard McGinn, 3–19. Ithaca, NY and London: Cornell University Press, 1992.
- Visions of the End: Apocalyptic Traditions in the Middle Ages*. New York: Columbia University Press, 1979.
- McGurk, Patrick. "Germanici Caesaris Aratea cum scholiis, a New Illustrated Witness from Wales." *National Library of Wales Journal* 18 (1973): 97–213.
- Meier, Christel. "Organisation of Knowledge and Encyclopaedic Ordo: Functions and Purposes of a Universal Literary Genre." In *Pre-Modern Encyclopaedic Texts: Proceedings of the Second COMERS Congress, Groningen, 1–4 July 1996*. Edited by Peter Binkley, 103–26. Leiden: Brill, 1997.
- Meirinhos, Jose Francisco. "Giovanni XXI." In *Enciclopedia dei Papi*, 2:427–8. Rome: Istituto della Enciclopedia Italiana, 2000.
- Meyer, Ann R. *Medieval Allegory and the Building of the New Jerusalem*. Cambridge and Rochester, NY: D. S. Brewer, 2003.
- Michels, Karen, ed. *Aby Warburg: Mit Bing in Rom, Neapel, Capri und Italien*. Hamburg: Corso, 2010.
- Miedema, Nine Robijntje. *Die Mirabilia Romae: Untersuchungen zu ihrer Überlieferung mit Edition der deutschen und niederländischen Texte*. Tübingen: Max Niemeyer, 1996.
- Miethke, Jürgen. "Die Kirche und die Universitäten im 13. Jahrhundert." In *Schulen und Studium im sozialen Wandel des hohen und späten Mittelalters*. Edited by Johannes Fried, 285–320. Sigmaringen: Jan Thorbecke, 1986.
- Migne, Jacques-Paul, ed. *Patrologiae Cursus Completus. Series Latina*. Paris: J. P. Migne, 1853.
- Mihályi, Melinda. "I cisterciensi a Roma e la decorazione pittorica dell'Abbazia delle Tre Fontane." *Arte Medievale* 5 (1991): 158–89.
- "Pittura profana a Roma al tempo del primo Giubileo." In *Bonifacio e il suo tempo*. Edited by Marina Righetti Tosti-Croce, 65–8. Milan: Electa, 2000.
- Miniati, Mara. *Misurare cielo e terra: strumenti scientifici tra medioevo e Rinascimento*. Brescia: Delfo, 2003.
- Mitchell, John. "St. Silvester and Constantine at the SS. Quattro Coronati." In *Federico II e l'arte del Duecento italiano*. Edited by Angiola Maria Romanini, 2:15–32. Rome: Galatina, 1980.
- Mitchell, W. J. T. *Picture Theory: Essays on Verbal and Visual Representation*. Chicago: University of Chicago Press, 1994.
- Montaubin, Paschal. "Bastard Nepotism: Niccolò di Anagni, a Nephew of Pope Gregory IX, and Camerarius of Pope

- Alexander IV." In *Pope, Church, and City: Essays in Honor of Brenda M. Bolton*. Edited by Frances Andrews, Christoph Egger, and Constance M. Rousseau, 129–76. Leiden: Brill, 2004.
- Moore, John C. *Pope Innocent III (1160/61–1216): To Root Up and Plant*. Notre Dame, IN: University of Notre Dame Press, 2009.
- Moore, Kenneth Royce, ed. *Brill's Companion to the Reception of Alexander the Great*. Leiden and Boston, MA: Brill, 2018.
- Moraw, Peter. "Careers of Graduates." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 244–79. Cambridge: Cambridge University Press, 1992.
- Moretti, Francesca Romana. "Dalla pagina min-iata alla decorazione muraria: un 'exemplum' nell'oratorio di San Tommaso Becket ad Anagni." In *Medioevo: le officine*. Edited by Arturo Carlo Quintavalle, 440–7. Milan: Electa, 2010.
- "La parabola delle dieci vergini nell'Oratorio di S. Tommaso Becket ad Anagni: Rappresentazione Pittorica di un drama medievale." In *Il Molise medievale: archeologia e arte*, 249–59. Borgo San Lorenzo: All'Insegna del Giglio, 2010.
- Moretti, Giuseppina Filippi. "I Santi Quattro Coronati: Nuove acquisizioni dai restauri architettonici." *Monumenti di Roma* 3 (2005): 113–20.
- "La torre di accesso al primo cortile del complesso dei Santi Quattro Coronati a Roma: la rielaborazione gotica sulle preesistenze classiche e romaniche." *Bollettino d'Arte* 86 (2001): 47–58.
- "Le vicende costruttive dell'Aula gotica nel complesso dei Santi Quattro Coronati." In *Gli affreschi dell'Aula Gotica nel Monastero dei Santi Quattro Coronati*. Edited by Andreina Draghi, 391–405. Milan: Skira, 2006.
- Morpurgo, Piero. "Oro potabile e prolongatio viate: fonti e influssi della cultura scientifica alla corte di Bonifacio VIII." In *Bonifacio VIII. Atti del XXXIX Convegno storico internazionale*, 445–72. Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 2003.
- Morris, Colin. *The Papal Monarchy: The Western Church from 1050 to 1250*. Oxford: Oxford University Press, 1989.
- Mörth, Ingo. "Contingency (Religious Studies)." In *Religion Past and Present: Encyclopedia of Theology and Religion*. Edited by Hans Dieter Betz, Don S. Browning, Bernd Janowski, and Eberhard Jüngel, 3:211. Leiden and Boston, MA: Brill, 2008.
- Mouriki, Doura. "The Theme of the 'Spinario' in Byzantine Art (πίν. 19–24)." *Δελτίον Χριστιανικής Αρχαιολογικής Εταιρείας* 24 (1972): 53–66.
- Müller, Kathrin. "Profane Knowledge, Sacred Insights: The Cosmological Diagrams in the Crypt of Anagni Cathedral." *Codex Aquilarensis* 33 (2017): 55–72.
- Visuelle Weltaneignung: astronomische und kosmologische Diagramme in Handschriften des Mittelalters*. Göttingen: Vandenhoeck & Ruprecht, 2008.
- Muñoz, Antonio. *Restauro della chiesa e del chiostro dei SS. Quattro Coronati*. Rome: Danesi, 1914.
- Nardi, Paolo. "Relations with Authority." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 77–107. New York and Cambridge: Cambridge University Press, 1992.
- Nelson, Robert S. "The Great Church and the Chora: Intervisuality in Fourteenth-Century Constantinople." *Byzantine and Modern Greek Studies* 23 (1999): 67–101.
- Neuman de Vegvar, Carol L. "The Origin of the Genoels-Elderin Ivories." *Gesta* 29 (1990): 8–24.
- Newman, William R. "An Overview of Roger Bacon's Alchemy." In *Roger Bacon and the Sciences*. Edited by Jeremiah Hackett, 317–36. Leiden: Brill, 1997.
- Niebyl, Peter H. "Old Age, Fever, and the Lamp Metaphor." *Journal of the History of Medicine and Allied Sciences* 26:4 (1971): 351–68.

- Noegel, Scott B. "Jonah and Leviathan: Inner-Biblical Allusions and the Problem with Dragons." *Henoch* 37:2 (2015): 236–60.
- Noga-Banai, Galit. "Dominus legem dat: von der Tempelbeute zur römischen Bildinvention." *Römische Quartalschrift für christliche Altertumskunde und Kirchengeschichte* 110:3–4 (2015): 157–74.
- Noll, Thomas. *Die Silvester-Kapelle in SS. Quattro Coronati in Rom: Ein Bildzyklus im Kampf zwischen kaiser und Papst*. Munich: Deutscher Kunstverlag, 2011.
- Norman, Diana. "The Art of Knowledge: Two Artistic Schemes in Florence." In *Siena, Florence, and Padua: Art Society and Religion, 1280–1400*. Edited by Diana Norman, 2:217–41. New Haven, CT: Yale University Press, 1995.
- "Astrology, Antiquity, and Empiricism: Art and Learning." In *Siena, Florence, and Padua: Art Society and Religion, 1280–1400*. Edited by Diana Norman, 1:197–215. New Haven, CT: Yale University Press, 1995.
- Norman, Joanne S. *Metamorphoses of an Allegory: The Iconography of the Psychomachia in Medieval Art*. New York: Peter Lang, 1988.
- North, John D. "The Astrolabe." *Scientific American* 230 (1974): 96–106.
- "Celestial Influence – The Major Premiss of Astrology." In "Astrologi hallucinati": *Stars and the End of the World in Luther's Time*. Edited by Paola Zambelli, 45–100. Berlin and New York: Walter de Gruyter, 1986.
- "Chronology and the Age of the World." In *Stars, Minds and Fate: Essays in Ancient and Mediaeval Cosmology*. London: Hambledon Press, 1989.
- Cosmos: An Illustrated History of Astronomy and Cosmology*. Chicago and London: Chicago University Press, 2008.
- "Medieval Concepts of Celestial Influence: A Survey." In *Astrology, Science and Society: Historical Essays*. Edited by Patrick Curry, 5–18. Woodbridge: Boydell Press, 1987.
- "Microcosm, Macrocosm, and Analogy." In *Imagination in the Later Middle Ages and Early Modern Times*. Edited by Lodi Nauta and Detlev Pätzold, 1–21. Leuven and Dudley, MA: Peeters, 2004.
- "Monasticism and the First Mechanical Clocks." In *Stars, Mind and Fate: Essays in Ancient and Mediaeval Cosmology*. Edited by J. D. North, 171–86. London: Hambledon Press, 1989.
- "Opus quarundam rotarum mirabilium." In *Stars, Mind and Fate: Essays in Ancient and Medieval Cosmology*. Edited by J. D. North, 135–70. London: Hambledon Press, 1989.
- "Some Norman Horoscopes." In *Adelard of Bath: An English Scientist and Arabist of the Early Twelfth Century*. Edited by Charles Burnett, 147–61. London: Warburg Institute, 1978.
- Nothaft, C. Philipp E. *Scandalous Error: Calendar Reform and Calendrical Astronomy in Medieval Europe*. New York: Oxford University Press, 2018.
- Noviello, Claudio. "Santi Quattro Coronati – Sala Gotica. L'apparato epigrafico." In *Gli affreschi dell'Aula gotica del Monastero dei Santi Quattro Coronati: una storia ritrovata*. Edited by Andreina Draghi, CD-ROM appendix, 1–93. Milan: Skira, 2006.
- Oancea, Constantin. "Chaoskampf in the Orthodox Baptism Ritual." *Acta Theologica* 37:2 (2017): 125–42.
- O'Boyle, Cornelius. *Medieval Prognosis and Astrology: A Working Edition of the Aggregationes de crisi et ceticis diebus*. Cambridge: Wellcome Unit for the History of Medicine, 1991.
- O'Hear, Natasha. *Contrasting Images of the Book of Revelation in Late Medieval and Early Modern Art: A Case Study in Visual Exegesis*. Oxford: Oxford University Press, 2011.
- Ohly, Friedrich. "The Cathedral as Temporal Space: On the Duomo of Siena." In *Sensus Spiritualis: Studies in Medieval Significs and the Philology of Culture*. Translated by Kenneth J. Northcott. Chicago: University of Chicago Press, 2005.
- "Hugh of Folieto's 'Dove Miniature'." In *Sensus Spiritualis: Studies in Medieval*

- Significs and the Philology of Culture*. Translated by Kenneth J. Northcott. Chicago: University of Chicago Press, 2005.
- “Synagoge und Ecclesia: Typologisches in mittelalterlicher Dichtung.” In *Judentum im Mittelalter*. Edited by Paul Wilpert, 350–69. Berlin: Walter de Gruyter, 1966.
- “Typologie als Denkform der Geschichtsbetrachtung.” In *Natur, Religion, Sprache, Universität: Universitätsvorträge 1982/83. Schriftenreihe der westfälischen Wilhelms-Universität Münster* 7. Edited by Heinz Dollinger, 68–102. Münster: Aschendorff, 1983.
- “Typology as a Form of Historical Thought.” In *Sensus Spiritualis: Studies in Medieval Significs and the Philology of Culture*. Translated by Kenneth J. Northcott. Chicago: University of Chicago Press, 2005.
- O’Keefe, John J. “Alexandrian Exegesis.” In *Encyclopedia of the Bible and Its Reception*, 1:764–8. Berlin and New York: Walter de Gruyter, 2009.
- O’Keefe John J. and Russel R. Reno. *Sanctified Vision: An Introduction to Early Christian Interpretation of the Bible*. Baltimore: Johns Hopkins University Press, 2005.
- Opitz, Christian Nikolaus. “Weltbild – Bildräume – Gedächtnisbilder: enzyklopädische Freskenzyklen im Repräsentationsräumen des 13.–15. Jahrhunderts.” In *Weltbilder im Mittelalter: Perceptions of the World in the Middle Ages*. Edited by Philipp Billion, 29–60. Bonn: Bernstein, 2009.
- Osborne, John. “Dado Imagery in the Lower Church of San Clemente, Rome, and Santa Maria Immacolata at Ceri.” In *Shaping Sacred Space and Institutional Identity in Romanesque Mural Painting: Essays in Honour of Otto Demus*. Edited by Thomas E. A. Dale, 35–50. London: Pindar Press, 2004.
- Osborne, John and Amanda Claridge. *The Paper Museum of Cassiano dal Pozzo. Early Christian and Medieval Antiquities. Volume 2: Other Mosaics, Paintings, Sarcophagi and Small Objects*. London: Harvey Miller, 1996.
- Ossa-Richardson, Anthony. *A History of Ambiguity*. Princeton, NJ and Oxford: Princeton University Press, 2019.
- Otter, Monika. “Baudri of Bourgueil, ‘To Countess Adela’.” *Journal of Medieval Latin* 11 (2001): 60–141.
- Pabst, Bernhard. *Gregor von Montesacro und die geistige Kultur Südtaliens unter Friedrich II*. Stuttgart: Steiner, 2002.
- Pajares-Ayuela, Paloma. *Cosmatesque Ornament: Flat Polychrome Geometric Patterns in Architecture*. New York: W. W. Norton, 2001.
- Panaccio, Claude. “Universals.” In *Oxford Handbook of Medieval Philosophy*. Edited by John Marenbon, 385–402. Oxford and New York: Oxford University Press, 2012.
- Panofsky, Erwin. *Early Netherlandish Painting: Its Origins and Character*. Cambridge, MA: Harvard University Press, 1966.
- Perspective as Symbolic Form*. Translated by Christopher S. Wood. New York: Zone Books, 1991.
- Renaissance and Renascences in Western Art*. Stockholm: Almqvist & Wiksell, 1960.
- Panofsky, Erwin and Fritz Saxl. “Classical Mythology in Medieval Art.” *Metropolitan Museum Studies* 4:2 (1933): 228–80.
- Paolini, Claudio. *Il pavimento del Battistero di Firenze: con una nota sul commesso dipietra e di legname*. Florence: Polistampa, 2006.
- Paravicini Bagliani, Agostino. *Bonifacio VIII*. Turin: Einaudi, 2003.
- Cardinali di curia e familiae cardinalizie dal 1227 al 1254*. Padova: Antenore, 1972.
- “Federico II e la Curia romana: rapporti culturali e scientifici.” In *Federico II e le scienze*. Edited by Pierre Toubert and Agostino Paravicini Bagliani, 439–58. Palermo: Sellerio, 1994.
- “Un matematico nella corte papale del secolo XIII: Campano da Novara (†1296).” *Rivista di Storia della Chiesa in Italia* 27 (1973): 98–129.
- Medicina e scienze della natura alla corte dei papi nel duecento*. Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1991.

- “Il mito della ‘prolongatio vitae’ e la corte pontificia del Duecento: il ‘de retardatione accidentium senectutis’.” In *Medicina e scienze della natura alla corte dei papi nel duecento*, 281–326. Spoleto: Centro Italiano di Studi sull’Alto Medioevo, 1991.
- “La mobilità della corte papale.” In *Itineranza pontificia: la mobilità della curia papale nel Lazio (secoli XII–XIII)*. Edited by Sandro Carocci, 3–78. Rome: Istituto Storico Italiano per il Medioevo, 2003.
- The Pope’s Body*. Translated by David S. Peterson. Chicago and London: University of Chicago Press, 2000.
- “Il ‘Registrum Causarum’ di Ottaviano Ubaldini e l’amministrazione della giustizia alla curia romana nel secolo XIII.” In *Römische Kurie. Kirchliche Finanzen. Vatikanisches Archiv. Studien zu Ehren von Hermann Hoberg*. Edited by Erwin Gatz, 2:635–57. Rome: Università Gregoriana Editrice, 1979.
- “Ruggero Bacone e l’alchimia di lunga vita. Riflessioni sui testi.” In *Alchimia e medicina nel Medioevo*. Edited by Chiara Crisciani and Agostino Paravicini Bagliani, 33–54. Florence: Edizioni del Galluzzi, 2003.
- Le Speculum Astronomiae, une énigme? Enquête sur les manuscrits*. Florence: Sismel and Edizioni del Galuzzo, 2001.
- Il trono di Pietro: l’universalità del papato dal Alessandro III al Bonifacio VIII*. Rome: La Nuova Italia Scientifica, 1996.
- “Witelo et la science optique à la cour pontificale de Viterbe (1277).” *Mélanges de l’École Française de Rome* 87 (1975): 427–53.
- Parlato Enrico. “Le icone in processione.” In *Arte e iconografia a Roma. Da Costantino a Cola di Rienzo*. Edited by Maria Andaloro and Serena Romano, 69–93. Milan: Jaca Book, 2000.
- “La processione di ferragosto e l’acheropita del sancta sanctorum.” In *Volto di Cristo*. Edited by Giovanni Morello and Gerhard Wolf, 51–2. Milan: Electa, 2000.
- Parlato, Enrico and Serena Romano. *Roma e il Lazio*. Milan: Jaca Book, 1992.
- Patton, Pamela. “Looking Forward and Backward with Janus.” *Index of Medieval Art*, January 10, 2018. <https://ima.princeton.edu/2018/01/10/looking-forward-and-backward-with-janus/>
- Pavia, Carlo. *Guida dei mitrei di Roma antica: dai misteriosi sotterranei della capitale: oro, incenso e Mithra*. Roma: Gangemi, 1999.
- Paxson, James J. “Gender Personified, Personification Gendered, and the Body Figuralized in Piers Plowman.” *Yearbook of Langland Studies* 12 (1998): 65–96.
- “Personification’s Gender.” *Rhetorica: Journal of the History of Rhetoric* 16:2 (1998): 165–79.
- The Poetics of Personification*. Cambridge and New York: Cambridge University Press, 1994.
- “A Theory of Biblical Typology in the Middle Ages.” *Exemplaria* 3:2 (1991): 93–117.
- Peltari, Aaron. *The Psychomachia of Prudentius: Text, Commentary, and Glossary*. Norman: University of Oklahoma Press, 2019.
- Pépin, Jean. “Saint Augustine et la fonction protréptique de l’allégorie.” *Recherches Augustiniennes* 1 (1958): 243–86.
- Pennington, Kenneth. “The Legal Education of Pope Innocent III.” *Bulletin of Medieval Canon Law* 70 (1974): 70–7.
- Pentcheva, Bissera. *Hagia Sophia: Sound, Space, and Spirit in Byzantium*. University Park: Penn State University Press, 2017.
- The Sensual Icon: Space, Ritual, and the Senses in Byzantium*. University Park: Penn State University Press, 2010.
- Perchuk, Alison Locke. *The Medieval Monastery of Saint Elijah: A History in Paint and Stone*. Turnhout: Brepols, 2021.
- Perrot, Françoise. “Le vitrail, la croisade, et la Champagne: réflexion sur les fenêtres hautes du choeur à la cathédrale de Chartres.” In *Les Champenois et la Croisade: actes des quatrième journées rémoises, 27–28 novembre 1987*. Edited by Yvonne Bellenger and Danielle Quérue, 109–30. Paris: Aux Amateurs de Livres, 1989.
- Peter Damian. *Letters 91–120*. Fathers of the Church: Mediaeval Continuation 5.

- Translated by Owen J. Blum, 195–206. Washington, DC: Catholic University of America, 1998.
- Peters, Edward. "Lotario di Conti di Segni Becomes Pope Innocent III: The Man and the Pope." In *Pope Innocent III and His World*. Edited by John Moore, 3–34. Aldershot and Brookfield, VT: Ashgate, 1999.
- Pfändtner, Karl-Georg. *Das Lobgedicht auf König Robert von Anjou. Facsimilekommentar zu Codex Series Nova 2639 der Österreichischen Nationalbibliothek*. Graz: Akademische Druck- und Verlagsanstalt, 2008.
- Picone, Michelangelo, ed. *L'enciclopedia medievale*. Ravenna: Longo, 1994.
- Pingree, David. "Boethius' Geometry and Astronomy: The *De Institutione Arithmetica* and *De Institutione Musica*." In *Boethius: His Life, Thought and Influence*. Edited by Margaret Gibson, 155–61. Oxford: Blackwell, 1981.
- Plato. *Timaeus and Critias*. Translated by Robin Waterfield. Oxford and New York: Oxford University Press, 2008.
- Plotinus. *Ennead. Volume III*. Translated by A. H. Armstrong. Loeb Classical Library 442. Cambridge, MA: Harvard University Press, 1967.
- Poirion, Daniel. "Les Mots et les choses selon Jean de Meun." *L'Information Littéraire* 26 (1974): 7–11.
- Poland, L. M. "Augustine, Allegory, and Conversion." *Literature and Theology* 2:1 (1988): 37–48.
- Poole, Reginald L. *Medieval Reckonings of Time*. London: Society for Promoting Christian Knowledge, 1918.
- Power, Amanda. *Roger Bacon and the Defense of Christendom*. Cambridge: Cambridge University Press, 2012.
- Pressouyre, Léon. "Le cosmos platonicien de la cathédrale d'Anagni." *Mélanges d'Archéologie et d'Histoire* 78 (1966): 551–93.
- Pressutti, Petrus, ed. *Regesta Honorii papae III ...*. Rome: Vaticana, 1895.
- Priester, Ann. "Bell Towers and Building Workshops in Medieval Rome." *Journal of the Society of Architectural Historians* 52:2 (1993): 199–220.
- Quadri, Irene. "Il ciclo dei mesi e le raffigurazioni allegoriche nella torre abbaziale di San Saba." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Edited by Serena Romano, 245–8. Milan: Jaca Book, 2012.
- "Il ciclo della *Vita Humana*." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 6: Apogeo e fine del Medioevo: 1288–1431*. Edited by Serena Romano, 94–101. Milan: Jaca Book, 2017.
- "I frammenti dei lavori dei mesi (?) nel Palazzo Senatorio." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Edited by Serena Romano, 242–4. Milan: Jaca Book, 2012.
- "Il perduto calendario di Santa Maria de Aventino." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Edited by Serena Romano, 238–41. Milan: Jaca Book, 2012.
- Quattrocchi, Claudia. *Un martire inglese alla curia di Roma. L'oratorio di San Thomas Becket di Canterbury nella cattedrale di Anagni*. Rome: Campisano Editore, 2017.
- Ramirez-Weaver, Eric. "So That You Can Understand This Better": Art, Science, and Cosmology for Courtiers in William of Conches' *Dragmaticon Philosophiae*." In *Diagramm und Text*. Edited by Eckart Conrad Lutz, Vera Jerjen, and Christine Putzo, 319–48. Wiesbaden: Reichert Verlag, 2014.
- Rampley, Matthew. "Iconology of the Interval: Aby Warburg's Legacy." *Word & Image* 17 (2001): 303–24.
- Ranft, Patricia. *Medieval Theology of Work: Peter Damian and the Medieval Religious Renewal Movement*. New York: Palgrave Macmillan, 2006.
- Rashed, Roshdi. "Fibonacci e la matematica araba." In *Federico II e le scienze*. Edited by Pierre Toubert and Agostino Paravicini Bagliani, 324–37. Palermo: Sellerio, 1994.

- Raskolnikov, Masha. *Body Against Soul: Gender and Soulehele in Middle English Allegory*. Columbus: Ohio State University Press, 2009.
- Ratkowitsch, Christine. *Descriptio Picturae: Die literarische Funktion der Beschreibung von Kunstwerken in der lateinischen Großdichtung des 12. Jahrhunderts*. Vienna: Verlag der Österreichischen Akademie der Wissenschaften, 1991.
- Reeves, Marjorie. "The 'Arbores' of Joachim of Fiore." *Papers of the British School at Rome* 24 (1956): 124–36.
- Ribémont, Bernard. *De natura rerum: études sur les encyclopédies médiévales*. Orléans: Paradigme, 1995.
- "Encyclopedias." In *Medieval Science, Technology, and Medicine: An Encyclopedia*. Edited by Thomas F. Glick et al., 159–61. New York: Routledge, 2005.
- Les origines des encyclopédies médiévales d'Isidore de Séville aux Carolingiens*. Paris: H. Champion, 2001.
- La "renaissance" du XIIe siècle et l'encyclopédisme*. Paris: H. Champion, 2002.
- Ricci, Daniela and Antonia Lauria. "Anagni papale." In *Bonifacio VIII e il suo tempo: Anno 1300 il primo giubileo*. Edited by Marina Righetti Tosti-Croce, 239–44. Milan: Electa, 2000.
- Riddle, John M. *Marbode of Rennes' De Lapidibus: Considered as a Medical Treatise with Text and Commentary, and C. W. King's Translation*. Wiesbaden: Franz Steiner Verlag, 1977.
- Rigby, Stephen Harris. *Wisdom and Chivalry: Chaucer's Knight's Tale and Medieval Political Theory*. Leiden: Brill, 2009.
- Rivera Recio, Juan Francisco. "Personajes hispanos asistentes en 1215 al IV Concilio de Letrán." *Hispania Sacra* 4 (1951): 335–8.
- Roberts, Michael. *The Jeweled Style Poetry and Poetics in Late Antiquity*. London and Ithaca, NY: Cornell University Press, 1989.
- Robinson, James, Naomi Speakman, and Kathryn Buehler-McWilliams, eds. *The British Museum Citoile: New Perspectives*. London: British Museum Press, 2015.
- Rodríguez de la Peña, Manuel Alejandro. "The 'Wise King' Topos in Context: Royal Literacy and Political Theology in Medieval Western Europe (c. 1000–1200)." In *The Routledge History of Monarchy*. Edited by Elena Woodacre et al., 38–53. New York: Routledge, 2019.
- Romano, Serena. "Gli affreschi dell'Aula Consiliare del Palazzo Senatorio." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Edited by Serena Romano, 312–16. Milan: Jaca Book, 2012.
- "I cantieri di Roma." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica*. Edited by Serena Romano, 13–42. Milan: Jaca Book, 2012.
- "Le decorazioni affrescate della residenza di San Clemente." In *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Edited by Serena Romano, 216–19. Milan: Jaca Book, 2012.
- "Domenico de Guzman." In *Enciclopedia dell'Arte Medievale*, 5:703. Rome: Istituto della Enciclopedia Italiana, 1991–2002.
- Edissi di Roma. Pittura murale a Roma e nel Lazio da Bonifacio VIII a Martino V (1295–1431)*. Rome: Argos, 1992.
- "Geografia del potere nella Roma del Duecento." In *Medioevo: la chiesa a il palazzo. Atti del Convegno internazionale di studi, Parma, 20–24 settembre 2005*. Edited by Arturo Carlo Quintavalle, 624–35. Milan: Electa, 2007.
- "Nuovi affreschi nella residenza di San Clemente a Roma: gli anni dei 'quattro cardinali'." In *Domus et splendida palatia: Residenze papali e cardinalizie fra XII e XV secolo*. Edited by Alessio Monciatti, 59–76. Pisa: Edizioni della Normale, 2004.
- La O di Giotto*. Milan: Electa, 2008.
- ed. *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 5: Il Duecento e la cultura gotica (1198–1287 ca.)*. Milan: Jaca Book, 2012.
- ed. *La pittura medievale a Roma, 312–1431: corpus e atlante. Volume 6: Apogeo e fine del Medioevo: 1288–1431*. Milan: Jaca Book, 2017.

- Ronquist, Eyvind C. "The Early Thirteenth-Century Monastic Encyclopedia in Verse of Gregorius de Monte Sacro." *Studi Medievali* 29:2 (1988): 841–71.
- Rooney, Kevin K., Robert J. Condia, and Lester C. Loschky. "Focal and Ambient Processing of Built Environments: Intellectual and Atmospheric Experiences of Architecture." *Frontiers in Psychology* 8 (2017). www.frontiersin.org/articles/10.3389/fpsyg.2017.00326/full
- Rothstein, Brett. *The Shape of Difficulty: A Fan Letter to Unruly Objects*. University Park: Penn State University Press, 2019.
- Roux, Brigitte. *Mondes en miniatures: l'iconographie du Livre du trésor de Brunetto Latini*. Paris: Librairie Droz, 2009.
- Rowe, Nina. *The Jew, the Cathedral and the Medieval City: Synagoga and Ecclesia in the Thirteenth Century*. Cambridge and New York: Cambridge University Press, 2011.
- "Synagoga Tumbles, a Rider Triumphs: Clerical Viewers and the Fürstenportal of Bamberg Cathedral." *Gesta* 45:1 (2006): 15–42.
- Rowland, Ingrid. "Bramante's Hetruscan Tempio." *Memoirs of the American Academy in Rome* 51–52 (2006–7): 225–38.
- Roy, Bruno. "Richard de Fournival, auteur du Speculum astronomiae." *Archives d'Histoire Doctrinale et Littéraire du Moyen Âge* 67 (2000): 159–80.
- Rudolph, Conrad. "In the Beginning: Theories and Images of Creation in Northern Europe in the Twelfth Century." *Art History* 22:1 (1999): 3–55.
- First I Find the Center Point: Reading the Text of Hugh of Saint Victor's "The Mystic Ark."* Philadelphia: American Philosophical Society, 2004.
- "Inventing the Exegetical Stained Glass Window: Suger, Hugh, and a New Elite Art." *Art Bulletin* 93 (2011): 399–422.
- "Inventing the Gothic Portal: Suger, Hugh of Saint Victor, and the Construction of a New Public Art at Saint-Denis." *Art History* 33:4 (2010): 568–95.
- The Mystic Ark: Hugh of Saint Victor, Art, and Thought in the Twelfth Century*. New York: Cambridge University Press, 2014.
- Rüegg, Walter. "Themes." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 3–34. Cambridge: Cambridge University Press, 1992.
- Russell, Josiah Cox. "Master Henry of Avranches as an International Poet." *Speculum* 3 (1928): 34–63.
- Russell, Josiah Cox and John Paul Heironimus. *The shorter Latin poems of Master Henry of Avranches Relating to England*. Cambridge, MA: Medieval Academy of America, 1935.
- Rutkin, H. Darrel. *Sapientia Astrologica: Astrology, Magic and Natural Knowledge, ca. 1250–1800. Volume 1: Medieval Structures (1250–1500): Conceptual, Institutional, Socio-Political, Theologico-Religious and Cultural*. Cham: Springer, 2019.
- Ryken, Leland, James C. Wilhoit, and Tremper Longman III, eds. *Dictionary of Biblical Imagery*. Downers Grove, IL: InterVarsity Press, 1998.
- Salvini, Roberto. *La Basilica di San Savino e le origini del romanico a Piacenza*. Modena: Artioli, 1978.
- Sandström, Sven. *Levels of Unreality: Studies in Structure and Construction in Italian Mural Painting During the Renaissance*. Uppsala: Almqvist & Wiksell, 1963.
- Santini, Carlo, ed. *Linguaggio figurativo della Fontana Maggiore di Perugia*. Perugia: Calzetti Mariuci, 1996.
- Saxl, Fritz. "Illuminated Science Manuscripts in England." In *Lectures*, 1:96–110. London: Warburg Institute, 1957.
- Lectures*. London: Warburg Institute, 1957.
- "Macrocosm and Microcosm in Medieval Pictures." In *Lectures*, 1:58–72. London: Warburg Institute, 1957.
- Mithras: Typengeschichtliche Untersuchungen*. Berlin: Verlag Heinrich Keller, 1931.
- Sayre Schiffman, Zachary. *The Birth of the Past*. Baltimore: Johns Hopkins University Press, 2011.
- Schaefer, Bradley E. "The Epoch of the Constellations on the Farnese Atlas and Their Origin in Hipparchus' Lost Catalog." *Journal for the History of Astronomy* 36 (2005): 167–96.

- Schaller, Hans Martin. "Das letzte Rundschreiben Gregors IX gegen Friedrich II." In *Festschrift Percy Ernst Schramm: zu seinem siebzigsten Geburtstag von Schülern und Freunden zugeeignet*, 1:309–21. Wiesbaden: Franz Steiner, 1964.
- Schapiro, Meyer. "On Some Problems in the Semiotics of Visual Art: Field and Vehicle in Image Signs." *Simiolus* 1 (1972–3): 9–19.
- Schiller, Gertrude. *Iconography of Christian Art*. 2 vols. London: Lund Humphries, 1972.
- Schimmelpfennig, Bernhard. "Papal Coronations in Avignon." In *Coronations: Medieval and Early Modern Monarchic Ritual*. Edited by János M. Bak, 179–96. Berkeley: University of California Press, 1990.
- Schmidt, Victor Michael. *A Legend and Its Image: The Aerial Flight of Alexander the Great in Medieval Art*. Groningen: E. Forsten, 1995.
- Schneider, Wolfgang Christian. "Bild und Text in der Silvesterkapelle des päpstlichen Herrschaftsbaus von SS. Quattro Coronati in Rom." In *Sacred Scripture / Sacred Space: The Interlacing of Real Places and Conceptual Spaces in Medieval Art and Architecture*. Edited by Tobias Frese, 287–322. Berlin and Boston, MA: Walter de Gruyter, 2019.
- Schoell-Glass, Charlotte. "En grisaille – Painting Difference." In *Text and Visuality: Word and Image Interactions III*. Edited by Martin Heusser, 197–204. Amsterdam and Atlanta, GA: Rodopi, 1999.
- Schüßler, Gosbert. "Zum Thomasfresko des Andrea Bonaiuti in der Spanischen Kapelle am Kreuzgang von Santa Maria Novella." *Mitteilungen des Kunsthistorischen Institutes in Florenz* 24 (1980): 251–74.
- Schwarz, Brigide. *Kurienuniversität und stadtrömische Universität von ca. 1300 bis 1471*. Leiden: Brill, 2012.
- Schweitzer, Bernhard. "Dea Nemesis Regina." *Jahrbuch des Deutschen Archäologischen Instituts* 46 (1931): 175–246.
- Schwinger, Rainer Christoph. "Student Education, Student Life." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 195–243. Cambridge: Cambridge University Press, 1992.
- Sears, Elizabeth. *The Ages of Man: Medieval Interpretations of the Life Cycle*. Princeton, NJ: Princeton University Press, 1986.
- Seidel, Max. *Father and Son: Nicola and Giovanni Pisano*. 2 vols. Munich: Hirmer, 2012.
- Settis, Salvatore. *Giorgione's Tempest: Interpreting the Hidden Subject*. Translated by Ellen Bianchini. Chicago: University of Chicago Press, 1990.
- Seznec, Jean. *The Survival of the Pagan Gods: The Mythological Tradition and Its Place in Renaissance Humanism and Art*. Princeton, NJ: Princeton University Press, 1953.
- Shahar, Shulamith. "The Old Body in Medieval Culture." In *Framing Medieval Bodies*. Edited by Sarah Kay and Miri Rubin, 160–86. Manchester and New York: Manchester University Press, 1994.
- Shearer, Creswell. *The Renaissance of Architecture in Southern Italy: A Study of Frederick II of Hohenstaufen and the Capua Triumphator Archway and Towers*. Cambridge: Heffer, 1935.
- Sherman, Claire Richter. *Imaging Aristotle: Verbal and Visual Representation in Fourteenth-Century France*. Berkeley: University of California Press, 1995.
- Sherwood Smith, Maria C. *Studies in the Reception of the Historia Scholastica of Peter Comestor: the Schwarzwälder Predigten, the Weltchronik of Rudolf von Ems, the Scolastica of Jacob van Maerlant and the Historiebijbel van 1360*. Oxford: Society for the Study of Medieval Languages and Literature, 2000.
- Simek, Rudolf. *Heaven and Earth in the Middle Ages: The Physical World Before Columbus*. Woodbridge: Boydell Press, 1996.
- Sinding-Larsen, Staal. *The Burden of the Ceremony Master: Image and Action in San Marco, Venice, and in an Islamic Mosque*. Rome: Norwegian Institute in Rome, 2000.
- Sirasi, Nancy G. *History, Medicine, and the Traditions of Renaissance Learning*. Ann Arbor: University of Michigan Press, 2007.
- Medicine and the Italian Universities, 1250–1600*. Leiden and Boston, MA: Brill, 2001.

- Medieval and Early Renaissance Medicine*. Chicago: University of Chicago Press, 1990.
- Taddeo Alderotti and His Pupils. Princeton, NJ: Princeton University Press, 1981.
- Smalley, Beryl. "Gregory IX and the Two Faces of the Soul." *Medieval and Renaissance Studies* 2 (1950): 179–82.
- Smith, Andrew. "Eternity and Time." In *The Cambridge Companion to Plotinus*. Edited by Lloyd P. Gerson, 196–216. Cambridge: Cambridge University Press, 1996.
- Smith, Earl Baldwin. *Early Christian Iconography and a School of Ivory Carvers in Provence*. Princeton, NJ: Princeton University Press, 1918.
- Smith, Mark. *The Early History of God: Yahweh and the Other Deities of Ancient Israel*. Grand Rapids, MI: William B. Eerdmans Publishing, 2002.
- Smith, Michael Q. "Anagni: An Example of Medieval Typological Decoration." *Papers of the British School at Rome* 33 (1965): 1–47.
- Smoller, Laura Ackermann. *History, Prophecy and the Stars: The Christian Astrology of Pierre d'Ailly, 1350–1420*. Princeton, NJ: Princeton University Press, 1994.
- Società Internazionale di Studi Francescani. *Il papato duecentesco e gli ordini mendicanti: atti del XXV Convegno internazionale, Assisi, 13–14 febbraio 1998*. Spoleto: Centro Italiano di Studi sull'Alto Medioevo, 1998.
- Sohn, Andreas. "Bilder als Zeichen der Herrschaft. Die Silvesterkapelle der Kirche in SS. Quattro Coronati." *Archivum Historiae Pontificiae* 35 (1997): 7–47.
- Somfai, Anna. "The Eleventh-Century Shift in the Reception of Plato's *Timaeus* and Calcidius's Commentary." *Journal of the Warburg and Courtauld Institutes* 65 (2002): 1–21.
- Southern, Richard William. *Scholastic Humanism and the Unification of Europe. Volume 1: Foundations*. Oxford and Cambridge, MA: Wiley-Blackwell, 1995.
- Stahl, William H. *Martianus Capella and the Seven Liberal Arts. Volume II: The Marriage of Philology and Mercury*. Translated by William Harris Stahl and Richard Johnson with E. L. Burge. New York: Columbia University Press, 1977.
- Roman Science: Origins, Development, and Influence to the Later Middle Ages*. Madison: University of Wisconsin Press, 1962.
- Stewart, Susan. *On Longing: Narratives of the Miniature, the Gigantic, the Souvenir, the Collection*. Durham, NC and London: Duke University Press, 1993.
- Stock, Brian. *Myth and Science in the Twelfth Century: A Study of Bernard Silvester*. Princeton, NJ: Princeton University Press, 1972.
- Stolz, Michael. *Artes-liberales-Zyklen: Formationen des Wissens im Mittelalter*. 2 vols. Tübingen and Basel: Frankce Verlag, 2004.
- "Faith and the Intellectuals, II." In *Cambridge History of Christianity. Volume 4: Christianity in Western Europe, c. 1100–1500*. Edited by Miri Rubin and Walter Simons, 394–404. New York: Cambridge University Press, 2009.
- "Wege des Wissens: Zur Konventionalität mittelalterlicher Artes-Bildlichkeit." In *Literatur und Wandmalerei II: Konventionalität und Konversation. Burgdorfer Colloquium 2001*. Edited by Eckart Conrad Lutz, Johanna Thali, and René Wetzel, 273–302. Tübingen: Max Niemeyer Verlag, 2005.
- Stroll, Mary. *Symbols as Power: The Papacy Following the Investiture Contest*. Leiden and New York: Brill, 1991.
- Stückelberger, Alfred. "Der gestirnte Himmel: Zum ptolemäischen Weltbild." In *Atlas der Weltbilder*. Edited by Christoph Marksches, 42–52. Berlin: Akademie Verlag, 2011.
- Sudhoff, Karl. "Zur Geschichte der Lehre von den kritischen Tagen im Krankheitsverlaufe." *Wiener Medizinische Wochenschrift* 52 (1902): 210–13, 272–5, 321–5, 371–4.
- Summers, David. *Real Spaces: World Art History and the Rise of Western Modernism*. London: Phaidon, 2003.
- Tachau, Katherine H. "God's Compass and Vana Curiositas: Scientific Study in the

- Old French Bible *moralisée*." *Art Bulletin* 80 (1988): 7–33.
- Vision and Certitude in the Age of Ockham: Optics, Epistemology, and the Foundations of Semantics, 1250–1345. Leiden and New York: Brill, 1988.
- Tatarkiewicz, Władysław. *History of Aesthetics*. Edited by Cyril Barrett. 3 vols. The Hague: Mouton, 1970–4.
- Terpening, Ronnie H. "The Lapidary of *L'Intelligenza*: Its Literary Background." *Neophilologus* 60 (1976): 75–88.
- Teviotdale, Elizabeth. "Music and Pictures in the Middle Ages." In *Companion to Medieval and Renaissance Music*. Edited by Tess Knighton and David Fallows, 179–88. Berkeley and Los Angeles: University of California Press, 1992.
- Theodulf of Orléans. "Opus Caroli regis contra synodum (Libri carolini)." In *Monumenta Germaniae Historica. Concilia. Volume 2, Supplement 1*. Edited by Ann Freeman with Paul Meyvaert. Hanover: Hahn, 1998.
- Thomas Aquinas. *Summa Theologica: Part II-II (Secunda Secundae)*. Translated by Fathers of the English Dominican Province. New York: Benziger Brothers, 1947.
- Thorndike, Lynn. *A History of Magic and Experimental Science*. 8 vols. New York and London: Columbia University Press, 1923–58.
- "John of Seville." *Speculum* 34 (1959): 20–38.
- Thorndike Lynn and Pearl Kibre. *A Catalogue of Incipits in Mediaeval Scientific Writings in Latin*. 2nd edition. Cambridge, MA: Medieval Academy of America, 1963.
- Thraede, Klaus. "Ianus." In *Reallexikon für Antike und Christentum*. Stuttgart: Hiersemann, 1994.
- Thredwell, Katherine. "Campanus de Novara." In *Medieval Science, Technology and Medicine: An Encyclopedia*. Edited by Thomas Glick, 111–13. New York: Routledge, 2005.
- Thunø, Erik. *The Apse Mosaic in Early Medieval Rome: Time, Network, and Repetition*. Cambridge and New York: Cambridge University Press, 2015.
- "Inscription and Divine Presence: Golden Letters in the Early Medieval Apse Mosaic." *Word & Image* 27:3 (2011): 279–91.
- "Looking at Letters: 'Living Writing' in S. Sabina in Rome." *Marburger Jahrbuch für Kunstwissenschaft* 34 (2007): 19–41.
- Tiliette, Jean-Yves. "La chambre de la Comtesse Adèle: Savoir scientifique et technique littéraire dans le c. CXCVI de Baudri de Bourgueil." *Romania* 102 (1981): 145–9.
- Toesca, Pietro. "Gli affreschi della cattedrale di Anagni." *Le Gallerie Nazionali Italiane* 5 (1902): 116–87.
- Tolan, John. *Faces of Muhammad: Western Perceptions of the Prophet of Islam from the Middle Ages to Today*. Princeton, NJ: Princeton University Press, 2019.
- Saracens: Islam in the Medieval European Imagination*. New York: Columbia University Press, 2002.
- Tomasi, Michele. "'Programmes' encyclopédiques dans la sculpture monumentale à Florence et à Venise au milieu du XIVe siècle: possibilités et limites de l'analyse." In *Le programme: une notion pertinente en histoire de l'art médiéval?* Edited by Jean Marie Guillouët and Claudia Rabel, 211–33. Paris: Le Léopard d'Or, 2011.
- Tomei, Alessandro. "Gli affreschi: una lettura." In *Un universo di simboli. Gli affreschi della cripta nella cattedrale di Anagni*. Edited by Gioacchino Giammaria, 39–48. Rome: Viella, 2001.
- "Dagli Svevi agli Angioini: declinazioni locali tra modelli romani e arte d'Oltralpe." In *La pittura medievale nell'Abruzzo aquilano*. Edited by Stefania Paone and Alessandro Tomei, 35–69. Cinisello Balsamo: Silvana, 2010.
- Trachtenberg, Marvin. *The Campanile of Florence Cathedral*. New York: New York University Press, 1971.
- Tronzo, William. "Moral Hieroglyphs: Chess and Dice at San Savino in Piacenza." *Gesta* 16 (1977): 15–26.
- Urciuoli, Saverio. "La cattedrale di Anagni: osservazioni sulla genesi di un modello basilicale desideriano." In *La cattedrale di Anagni. Materiale per la ricerca, il restauro, la*

- valorizzazione. *Bolletino d'Arte volume speciale*, 187–225. Rome: Istituto Poligrafico e Zecca dello Stato, 2006.
- Valentini, Roberto and Guiseppe Zucchetti, eds. *Codice topografico della città di Roma*. Rome: Tipografia del Senato, 1943.
- Van Cleve, Thomas Curtis. *The Emperor Frederick II of Hohenstaufen, Immutator Mundi*. Oxford: Clarendon Press, 1972.
- Varanelli, Emma Simi. *Artisti e dottori nel Medioevo. Il campanile di Firenze e la rivalutazione delle "arti belle"*. Rome: Istituto Poligrafico e Zecca dello Stato, 1995.
- Verger, Jacques. "Études et culture universitaires du personnel de la Curie avignonnaise." In *Aux origines de l'État moderne. Le fonctionnement administratif de la papauté d'Avignon. Actes de la table ronde d'Avignon (22–24 janvier 1988)*. Collection de l'École française de Rome 138, 61–78. Rome: L'École Française de Rome, 1990.
- "Patterns." In *A History of the University in Europe. Volume 1: Universities in the Middle Ages*. Edited by Hilde de Ridder-Symonens, 35–76. Cambridge: Cambridge University Press, 1992.
- Verkerk, Dorothy Hoogland. "The Font Is a Kind of Grave: Remembrance in the Via Latina Catacombs." In *Memory and the Medieval Tomb*. Edited by Elizabeth Valdez del Alamo and Carol Stamatis Pendergast, 157–71. Aldershot: Ashgate, 2000.
- Vermaseren, Maarten Jozef. *Corpus Inscriptionum et Monumentorum Religionis Mithriacae*. 2 vols. The Hague: M. Nijhoff, 1956–60.
- Verstegen, Ian. "Otto Demus, Byzantine Art and the Spatial Icon." *Journal of Art Historiography* 19 (2018): 1–24.
- Verzár Bornstein, Christine. *Portals and Politics in the Early Italian City-State: The Sculpture of Nicholas in Context*. Parma: Università degli Studi di Parma, Istituto di Storia dell'Arte, Centro di Studi Medievali, 1988.
- Vigi, Berenice Giovannucci and Giovanni Sassu, eds. *Il Maestro dei Mesi e il portale meridionale della Cattedrale di Ferrara*. Ferrara: Museo della Cattedrale, 2007.
- Vinci, Maria Gloria. "Il Cardinale cistercense Giovanni da Toledo e gli interessi per la medicina e l'alchimia alla corte dei papi del XIII secolo." *Rivista Cistercense* 7 (2000): 5–32.
- Vitruvius. *Ten Books on Architecture*. Translated by Ingrid D. Rowland. Cambridge: Cambridge University Press, 1999.
- Voci, Anna Maria. "I palazzi papali del Lazio." In *Itineranza pontificia: la mobilità della curia papale nel Lazio (secoli XII–XIII)*. Edited by Sandro Carocci, 211–49. Rome: Istituto Storico Italiano per il Medio Evo, 2003.
- von Schlosser, Julius. "Giusto's Fresken in Padua und die Vorläufer der Stanza della Segnatura." *Jahrbuch der Kunsthistorischen Sammlungen in Wien* 17 (1896): 13–100.
- Quellenbuch zur Kunstgeschichte des abenländischen Mittelalters*. Vienna: C. Graeser, 1896.
- Von Steenberghen, Fernand. *Aristotle in the West: The Origins of Latin Aristotelianism*. Translated by Leonard Johnston. Louvain: Nauwelaerts, 1955.
- Voss, Irmgard and Peter Cornelius Claussen. "Das Paviment von S. Clemente. Mit einer neuen zeichnerischen Aufnahme." *Römisches Jahrbuch der Bibliotheca Hertziana* 27–8:1991–2 (1993): 1–22.
- Wagner, David L., ed. *The Seven Liberal Arts in the Middle Ages*. Bloomington: Indiana University Press, 1983.
- Wagner, Peter, ed. *Icons, Texts, Iconotexts: Essays on Ekphrasis and Intermediality*. Berlin: Walter de Gruyter, 1996.
- Waldron, Andrew. "Lex Talionis." *Arizona Law Review* 34 (1992): 25–51.
- Wallis, Faith, ed. and trans. *Medieval Medicine: A Reader*. Toronto: University of Toronto Press, 2010.
- Walter, Christopher. "Papal Political Imagery in the Medieval Lateran Palace." *Cahiers Archéologiques Fin de l'Antiquité et Moyen Age* 20 (1970): 155–76.
- "Papal Political Imagery in the Medieval Lateran Palace." *Cahiers Archéologiques Fin de l'Antiquité et Moyen Age* 21 (1971): 109–36.

- Wamberg, Jacob. *Landscape as World Picture: Tracing Cultural Evolution in Images*. Aarhus: Aarhus University Press, 2009.
- Wandhoff, Haiko. *Ekphrasis: Kunstbeschreibungen und virtuelle Räume in der Literatur des Mittelalters*. Berlin: Walter de Gruyter, 2003.
- “Found(ed) in a Picture: Ekphrastic Framing in Ancient, Medieval and Contemporary Literature.” In *Framing Borders in Literature and Media*. Edited by Werner Wolf and Walter Bernhart, 207–27. Amsterdam and New York: Rodopi, 2006.
- “Im Virtuellen Raum des Textes: Bild, Schrift und Zahl in Chrétiens de Troyes ‘Érec et Énide’.” In *Wissen und neue Medien: Bilder und Zeichen von 800 bis 2000*. Edited by Ulrich Schmitz, 39–56. Berlin: Schmidt, 2003.
- “Zur Blidlichkeit mittelalterlicher Texte.” *Das Mittelalter* 13 (2008): 3–18.
- Ware, R. Dean. “Medieval Chronology: Theory and Practice.” In *Medieval Studies: An Introduction*. Edited by James M. Powell, 252–77. Syracuse, NY: Syracuse University Press, 1992.
- Warner, Marina. *Monuments and Maidens: The Allegory of the Female Form*. New York: Atheneum, 1985.
- Watt, J. A. “The Papacy.” In *The New Cambridge Medieval History*. Edited by David Abulafia, 5:107–63. Cambridge: Cambridge University Press, 2008.
- Webb, Ruth. “Ekphrasis Ancient and Modern: The Invention of a Genre.” *Word & Image* 15 (1999): 7–18.
- Ekphrasis, Imagination and Persuasion in Ancient Rhetorical and Practice*. Aldershot: Ashgate, 2009.
- Weber, Michael C. “Thierry of Chartres.” In *Medieval Science, Technology and Medicine: An Encyclopedia*. Edited by Thomas F. Glick, 476. New York and London: Routledge, 2005.
- Webster, James Carson. *The Labors of the Months in Antique and Mediaeval Art to the End of the Twelfth Century*. Evanston, IL: Northwestern University Press, 1938.
- Wedel, Theodore Otto. *The Mediaeval Attitude Toward Astrology, Particularly in England*. New Haven, CT: Yale University Press, 1920.
- Wegter-McNelly, Kirk. “Contingency and Necessity.” In *Religion Past and Present: Encyclopedia of Theology and Religion*. Edited by Hans Dieter Betz, Don S. Browning, Bernd Janowski, and Eberhard Jüngel, 3:463–4. Leiden and Boston, MA: Brill, 2007.
- Weinryb, Ittai. *The Bronze Object in the Middle Ages*. Cambridge: Cambridge University Press, 2016.
- “Living Matter: Materiality, Maker, and Ornament in the Middle Ages.” *Gesta* 52:2 (2013): 113–32.
- Weinstock, Stefan. “The Author of Ps.-Galen’s *Prognostica de Decubitu*.” *Classical Quarterly* 42:1–2 (1948): 41–3.
- Weisser, Christoph. *Studien zum mittelalterlichen Krankheitslunar: Ein Beitrag zur Geschichte laienastrologischer Fachprosa*. Würzburger medizinhistorische Forschungen 21. Pattensen: H. Wellm, 1981.
- Weitzmann, Kurt. “The Genesis Mosaics of San Marco and the Cotton Genesis Miniatures.” In Otto Demus, *The Mosaics of San Marco in Venice*. 2 vols. 1:105–42. Chicago and London: University of Chicago Press, 1984.
- Wenzel, Horst. *Hören und Sehen, Schrift und Bild: Kultur und Gedächtnis im Mittelalter*. Munich: Beck, 1995.
- Spiegelungen: Zur Kultur der Visualität im Mittelalter*. Berlin: Schmidt, 2009.
- West, Jeffrey. “A Taste for the Antique? Henry of Blois and the Arts.” In *Anglo-Norman Studies XXX: Proceedings of the Battle Conference 2007*, 213–30. Woodbridge: Boydell and Brewer, 2008.
- White, John. “The Reconstruction of Nicola Pisano’s Perugia Fountain.” *Journal of the Warburg and Courtauld Institutes* 33 (1970): 70–83.
- White, Lynn. “Medical Astrologers and Late Medieval Technology.” In *Medieval Religion and Technology: Collected Essays*.

- Los Angeles: University of California Press, 1978.
- “Temperantia and the Virtuousness of Technology.” In *Medieval Religion and Technology: Collected Essays*. Los Angeles: University of California Press, 1978.
- Whitehead, Christiana. *Castles of the Mind: A Study of Medieval Architectural Allegory*. Cardiff: University of Wales Press, 2003.
- Whitman, Jon. *Allegory: The Dynamics of an Ancient and Medieval Technique*. Oxford and New York: Clarendon Press, 1987.
- Whitney, K. William. *Two Strange Beasts: Leviathan and Behemoth in the Second Temple and Early Rabbinic Judaism*. Winona Lake, IN: Eisenbrauns, 2006.
- Wickham, Chris. *Medieval Rome: Stability and Crisis of a City, 900–1150*. Oxford: Oxford University Press, 2015.
- Willemssen, Carl A. *Kaiser Friedrichs II Triumph tor zu Capua: Ein Denkmal Hohenstaufischer Kunst in Suditalien*. Wiesbaden: Insel-Verlag, 1953.
- Williams, Steven J. “Defining the Corpus Aristotelicum: Scholastic Awareness of Aristotelian Spuria in the High Middle Ages.” *Journal of the Warburg and Courtauld Institutes* 58 (1995): 29–51.
- “The Early Circulation of the Pseudo-Aristotelian Secret of Secrets in the West: The Papal and Imperial Courts.” In *Le scienze alla corte di Federico II. Sciences at the Court of Frederick II*. Edited by Michael McVaugh and Véronique Pasche, 127–44. Turnhout: Brepols, 1994.
- “Repenser l’intention et l’effet des décrets de 1231 du pape Grégoire IX sur l’étude des libri naturales d’Aristote à l’Université de Paris.” In *L’enseignement de la philosophie au XIIIe siècle*, 139–66. Turnhout: Brepols, 1997.
- “Roger Bacon and the Secret of Secrets.” In *Roger Bacon and the Sciences*. Edited by Jeremiah Hackett, 365–94. Leiden: Brill, 1997.
- The Secret of Secrets: The Scholarly Career of a Pseudo-Aristotelian Text in the Latin Middle Ages*. Ann Arbor: University of Michigan Press, 2003.
- Williamson, Paul. *Gothic Sculpture 1140–1300*. New Haven, CT: Yale University Press, 1995.
- Wilpert, Josef. *Die römischen Mosaiken und Malereien der Kirchlichen Bauten vom IV. bis XIII. Jahrhundert*. Freiburg im Breisgau: Herder, 1916.
- Wolf, Gerhard. *Salus Populi Romani. Die Geschichte römischer Kultbilder im Mittelalter*. Weinheim: VCH, Acta Humaniora, 1990.
- Wolf, Kenneth B. “Muḥammad as Antichrist in Ninth-Century Cordoba.” In *Christians, Muslims, and Jews in Medieval and Early Modern Spain: Interaction and Cultural Change*. Edited by Mark Meyerson and Eric English, 3–19. Notre Dame, IN: University of Notre Dame Press, 1999.
- Wood, Christopher S. *Albrecht Altdorfer and the Origins of Landscape, revised and expanded second edition*. London: Reaktion Books, 2014.
- A History of the History of Art*. Princeton, NJ: Princeton University Press, 2019.
- Wright, D. F. “A Medieval Commentary on the Mass: *Particulae* 2–3 and 6–6 of the *De misterium mysteriis* (ca 1195) of Cardinal Lothar of Segni (Pope Innocent III).” PhD diss., University of Notre Dame, 1977.
- Young, Frances M. *Biblical Exegesis and the Formation of Christian Culture*. Cambridge and New York: Cambridge University Press, 1997.
- Zacher, Christian K. *Curiosity and Pilgrimage: The Literature of Discovery in Fourteenth-Century England*. Baltimore: Johns Hopkins University Press, 1976.
- Zahlten, Johannes. *Creatio Mundi: Darstellungen Der sechs Schöpfungstage und naturwissenschaftliches Weltbild im Mittelalter*. Stuttgart: Klett-Cotta, 1979.
- Zambelli, Paola. *The Speculum Astronomiae and Its Enigma: Astrology, Theology and Science in Albertus Magnus and His Contemporaries*. London: Kluwer Academic Publishers, 1992.
- Zappasodi, Pietro. *Anagni attraverso i secoli*. 2 vols. Veroli: Atesa, 1908.
- Zchomelidse, Nino M. *Art, Ritual, and Civic Identity in Medieval Southern Italy*.

- University Park: Penn State University Press, 2014.
- “Deus – Homo – Imago: Representing the Divine in the Twelfth Century.” In *Looking Beyond: Visions, Dreams and Insights in Medieval Art and History*. Edited by Colum Hourihane, 107–27. Princeton, NJ: Department of Art and Archaeology, Princeton University, in association with Penn State University Press, 2010.
- “Liminal Phenomena: Framing Medieval Cult Images with Relics and Words.” *Viator* 47:3 (2016): 243–96.
- Santa Maria immacolata in Ceri. La pittura Sacra al tempo della Riforma Gregoriana*. Rome: Archivio Guido Izzi, 1996.
- Zevit, Zion. “Three Ways to Look at the Ten Plagues.” *Bible Review* 6:3 (1990): 16–23.
- Ziegler, Joseph. “Faith and the Intellectuals I.” In *The Cambridge History of Christianity. Volume 4: Christianity in Western Europe, c. 1100–1500*. Edited by Miri Rubin and Walter Simons, 372–93. Cambridge: Cambridge University Press, 2009.
- Ziolkowski, Jan M. *Alan of Lille’s Grammar of Sex: The Meaning of Grammar to a Twelfth-Century Intellectual*. Cambridge, MA: Medieval Academy of America, 1985.
- The Juggler of Notre Dame and the Medievalizing of Modernity*. 4 vols. Cambridge: Open Book Publishers, 2018.
- Zutshi, Patrick N. R. “The Avignon Papacy.” In *The New Cambridge Medieval History*. Edited by Michael Jones, 6:653–73. Cambridge: Cambridge University Press, 2000.

INDEX

Note: Page numbers in *italics* refer to figures, and medieval names are given uninverted, in natural word order (e.g., Thomas Aquinas, not Aquinas, Thomas).

- Aavitsland, Kristin, 34–5, 139, 179
 Abel, 150–3, 150–1, 273–4, 274, 276
 Abraham, 222, 223
 Abu Ma'shar
 Great Introduction to Astrology, 270
 Adam, 276
Adelae comitissae (Baudri of Bourgueil), 52
 Agincourt, Seroux d', 34
 agricultural activities
 in calendar imagery, 32–3, 69, 142
 labors of the months, 130, 133–6
 theological conception of, 137–40
 Ahab, 223
 Aion, 131, 154–8, 156–7
 Akbari, Suzanne Conklin, 230
 Alan of Lille, 165, 230
 Anticlaudianus, 83, 103
 De planctu naturae, 52, 102
 Albertus Magnus, 90
 alchemy and transmutation, 264, 272–3
 Alexander IV, 38, 127
 Alexander the Great, 186, 192, 194, 204
 allegory. *see also* history; virtues and vices
 allegorical animals, 26–8
 biblical exegesis and, 218
 blurred with history, 204
 changing attitudes toward, 230
 dubious links to reality, 230
 personification allegory's equivocality, 230
 prosopopoeia, 219–20
 Alphonso X of Castile, 206
 Alvarus of Cordoba, 185
 Amon-Re, 168
 Anagni Cathedral, 18, 18, 60, 244, 252–3, 253
 Anagni crypt frescoes. *see also* elements, four;
 microcosm; papacy–Frederick II conflict
 about fresco program, 5, 5, 19, 20–3, 22, 243–5,
 281
 alchemy and, 273
 apocalypse, 22, 45, 257, 264, 266
 as apologia for extra-theological knowledge, 278
 Ark of the Covenant, 21, 21, 163, 253–7, 254
 astrology, 245–52, 247, 259, 278–9
 Cain and Abel, 274, 274
 cosmological knowledge, 20, 45, 245–52, 248,
 257, 291
 creation theory in, 260–7
 earthbound perspective, 279
 encyclopedism of, 6–7, 20, 245, 259
 four elements, 20, 45, 249, 250, 260
 Galen, 20, 21, 45, 245, 246, 267–8, 273, 274
 Gregory IX likely sponsor of frescoes, 6, 45
 grisaille technique, 274
 hagiographical images, 20, 22
 Hippocrates, 20, 21, 45, 245, 246, 267–8, 273, 274
 Homo signorum, 270
 human materiality, 279–81
 images establishing dialogue across space, 253–8,
 263–6
 marine frieze, 263, 263
 medicine, 245–52, 246, 257, 259
 as monumental image of world's knowledge,
 291–3
 mortality explored, 273–4
 papacy's interest in worldly knowledge, 6, 46
 papal associations, 45–6, 252–3, 296
 purpose and function of, 253
 Saint Aurelia, 20, 23
 Saint Magnus, 20, 24, 253, 255, 257, 274, 274
 Saint Neomisia, 20, 23
 Saint Sebastian, 20, 23
 Saint Secundina, 20, 23
 Santi Quattro Coronati, links with, 5–7, 244–5
 scriptural and astro-medical knowledge
 coexisting, 303
 sight instrumental for knowledge, 281
 spectatorship in, 22, 251, 253–9, 262, 279
 as tool for philosophical thinking, 291–2
 unity of frescoes, 20, 22, 281
 unity with built environment, 245, 251, 265
 Anagni, Italy, 5, 252, 257, 283
 Andberg, Bjarne, 8, 263
 Andrea di Bonaiuto, 293, 293
 Andrea Pisano, 294, 295, 297

- animals, 16, 26–8, 28, 35, 158, 159, 160, 162
 Antichrist, 43, 45, 185, 204, 212
Anticlaudianus (Alan of Lille), 83, 103
 Antiochus, 185
 apocalypse cycle, 22, 24, 45, 213, 218, 257
 Apuleius, 88, 93, 95, 103
 Arabic texts, 40, 47, 77, 89–90, 278
 archers, 29
 Archimedes, 89
 architectural space, affecting experience of frescoes,
 54–8, 245, 291–2
 Arena Chapel, Padua, 228, 228
 Arian Baptistry, Ravenna, 164, 164
 Aristotle, 77, 86, 90, 91, 93, 95, 275, *see also* natural
 philosophy
 arithmetic, 99, 108
 Arius of Alexandria, 190, 190
 Ark of the Covenant, 21, 25, 163, 253–7, 254
 Asclepius, 166, 167
Astrologia Ypocratis (Pseudo-Hippocrates), 268
 astrology. *see also* cosmos and cosmological
 knowledge; medicine
 Anagni crypt frescoes, 245–52, 247, 259, 278–9
 Arabic texts, 278
 astro-medicine, 267–73, 277, 303
 future knowledge through, 277–9
Liber astrologiae (Georgius Fendulus),
 29, 30
 limb assignment theory (*melotesia*),
 268–9
 materiality and, 245–52, 259, 279–81
 medicine's astrological dimension, 259
 microcosm, 257
 papal cultivation of, 45, 247, 251, 272, 278
 political power and, 277
 temporality and, 245–52, 259
 theology, compatible with, 279
 astronomy, 108–9
 Atkinson, Niall, 124
 Atlas, 95, 113, 154
 Augustine, 79, 191, 192, 218, 230, 300–3
 On Christian Doctrine, 79, 301
 Babylon, 227
 Bagnoli, Martina, 8
 Bamberg Apocalypse, 220–3, 222
 Bamberg Cathedral, 201, 203
 Barelli, Lia, 7
 Bargello, Florence, 197, 198
 Baudri of Bourgueil
 Adelae comitissae, 52
 bells and bell towers, 4, 105, 107, 124, 129, 294, 295,
 296, 297
 Berenbeim, Jessica, 211
 Bernard of Chartres, 98, 100
 Bertelli, Carlo, 173
 biblical exegesis, 218, 239
 Blume, Dieter, 7
 Boethius
 contingency, 277
 human versus divine knowledge, 292
 mathematics developed by, 93
 music and, 109
 Philosophy as female, 122
 on quadrivium, 108
 representing Arithmetic, 92
 representing Geometry, 86, 88, 95, 103
 representing Music, 110
 Santi Quattro Coronati's Geometry and, 89
 De institutione arithmetica, 80
 De musica, 109
 Bonatti, Guido
 Liber astronomiae, 269, 270
 Boniface VIII, 40
 Boskovits, Miklos, 45
 Brancalone degli Andalò, 32
 Brunetto Latini
 Libre du Tresor, 85, 86
 Caetani family, 252
 Caiaphas, 228, 228
 Cain, 150–1, 150–3, 185, 273–6, 274
 Calcidius, 264
 calendar imagery. *see also* labors of the months; time
 and temporal knowledge
 agricultural activities, 32–3, 69, 142
 about calendars, 129–30
 cosmos and, 131, 231
 courtly activities, 33
 descriptive summary, 174
 expression of ecclesiastical authority,
 128
 hagiographical stories, 32
 labors of the months and, 31, 143–5
 manuscript conventions reproduced, 33–4
 mortality explored in, 275–6
 Palazzo Senatorio, 32, 142, 142
 popularity of, 141–4
 Roman palace painting and, 30–4
 San Pellegrino in Bominaco, 143–4, 144
 San Saba basilica, 31, 143
 Santa Maria de Aventino, 32–4, 33, 142, 144, 144
 Santi Quattro Coronati frescoes, 3, 14, 30, 31, 69
 Sylvester Chapel liturgical calendar,
 128, 129
 Tre Fontane Cistercian abbey, 34, 174
 Calixtus II, 197, 217
 campanile, Florence, 4, 294, 295, 296, 297
 Cappelletti, Lorenzo, 8
 Capuan Gateway, Capua, 209, 209
 Carruthers, Mary, 81
 Cassiodorus, 79, 86, 92–3
 Celestine IV, 271
Chaoskampf (chaos-struggle), 169
 Charles I of Anjou, 40
 Chartres Cathedral, 95–7, 96, 99, 201, 235

- Chrétien de Troyes
Érec et Énide, 52
 Christ, 164, 164, 169, 228, 229
 Cicero, 90, 91–2, 92–3, 94, 95
 Clarke, John R., 67
 Clotho, 148
 Cole, Bruce, 228
 Concordat of Worms, 217
 Constantine, 42, 42, 108, 215–16, 215
 Constitutions of Melfi, 208
 Conti family, 38, 78, 252
 Cosmati family, 18, 252
 cosmos and cosmological knowledge. *see also*
 astrology; microcosm; zodiac and
 constellations
 Anagni crypt frescoes, 20, 45, 245–52, 248, 257,
 291
 calendar and, 131, 231
 creation theory and, 263
 Homo signorum, 269–71, 270
 liberal arts integrated with, 74
 matter's ability to change, 267
 medicine and, 257
 models of, 69, 291
 months and seasons, joined with, 29
 order and chaos, 264
 personifications, 17
 planets and stars, 13, 29, 142, 246, 248, 248, 268–9
 Plato's cosmogony, 260–1
 San Saba basilica, 29, 29
 creation theory, 146–53, 231, 257, 260–7, 262
 Croesus, 227
 cults, pagan, 161–5, 167–70, *see also* Mithras; river
 gods
 Cyrus, 227

 Daniel, 58–9, 189
 David, 189, 189, 222, 223, 226–7
 David of Dinant, 118
De institutione arithmetica (Boethius), 80
De musica (Boethius), 109
De nuptiis Philologiae et Mercurii (Martianus Capella),
 79
De ortu et obitu patrum (Isidore of Seville), 223
De planctu naturae (Alan of Lille), 52
De retardatione accidentium senectutis (Dominus Castri
 Goet), 47
 Demus, Otto, 54, 67
 disguised symbolism, 180
 distaff motif, 146–53, 275, 288
 Doge's Palace, Venice, 4, 295, 296–7
 Dominic de Guzmán, 192, 196, 204–5
 Dominus Castri Goet
 On Delaying the Symptoms of Old Age (*De*
 retardatione accidentium senectutis), 47, 272
 Domitian, 185
 Donation of Constantine, 42, 78, 214–17, 215–16,
 303
 Donatus, 94, 94
 Draghi, Andreina, 1, 7, 78, 145–6, 207, 244

 Ebstorf Map, 49, 51
 Eclissi, Antonio, 32, 33, 143, 201, 204
 Eco, Umberto, 165
 elements, four
 Anagni crypt frescoes, 20, 45, 249, 250, 260
 chaos and order, 264
 creation theory and, 260–4, 267
 human aging and, 272–3
 human body's connection to material world, 246
 medicine and, 259–60
 syzygy fresco, 21, 45, 260–1, 274
 Elijah, 163, 223
 Elsner, Jaś, 183
 encyclopedias
 Anagni crypt frescoes, 6–7, 20, 245, 259
 cathedral sculptures as, 51
 comprehensiveness, 48–9, 53
 divine knowledge, 259
 encyclopedic ekphrasis, 53
 encyclopedic motifs in pictorial programs, 53,
 293–5, 299
 florilegia, 20, 34
 organization of knowledge, 7, 48
 pictorial encyclopedias, 13, 49–53, 293–9
 political self-representation, 293–9
 rise in encyclopedism, 48
 Santi Quattro Coronati frescoes, 4, 6–7, 13, 48–9,
 55
 Secretum secretorum (Philip of Tripoli), 47
 visual metaphors and literary descriptions, 52–3
 world maps (*nappae mundi*), 49, 51
Érec et Énide (Chrétien de Troyes), 52
Etymologies (Isidore of Seville), 93, 99
 eucharist, 158
 Euclid, 86, 88, 89, 91, 91, 95, 103
 Evans, Michael, 85, 126
 Eve, 148, 149
 Exodus, 168–9
 Ezekiel, 213

 Fassler, Margot, 109
 Ferrara Cathedral, 150, 150
 Fontana Maggiore, Perugia, 4, 100, 101, 294, 294,
 296, 299–300
 four humors, 275, *see also* elements, four
 Francis of Assisi, 192, 195, 204–5, 236
 Franklin-Brown, Mary, 122
 Frederick II of Hohenstaufen, 214, *see also* papacy-
 Frederick II conflict
 Constitutions of Melfi, 208
 crowned Holy Roman Emperor, 41
 cultural flowering at imperial court, 41, 47
 jurisprudence and, 207
 as “new Solomon”, 43, 206
 frescoes, generally, 53–4

- Galen, 246, 274
 Anagni crypt frescoes, 20, 21, 45
 astro-medicine, 268, 273
 body connected to material world, 245, 267
 lamp motif, 275
- Gardner, Julian, 104
- gendered knowledge, 95–7, 102–3
- Genesis, 179, 261–4, 276, 285
- Georgius Fendulus
Liber astrologiae, 29
- Giotto, 228, 228
- Giovanni Pisano, 101, 299–300
- Gombrich, Ernst, 122
- Gorgias, 93, 94, 95
- Götze, Oliver, 7
- grammar, 99–103, 100
- great hall frescoes, Santi Quattro Coronati, 2, 14,
see also calendar imagery; labors of the months;
 liberal arts; spectatorship; virtues and vices
- about, 1
 acrobats, 55, 56
 ambient vision and, 56
 Cain and Abel, 151, 151, 275–6
 calendar cycle, 69
 cosmos, model of, 69, 291
 encyclopedic rhetoric of, 7, 13, 48–9, 55
 illusionistic telamones and, 55, 56
 interactive design, 55–8
 Job, 151, 152
 missing sections, 60
 mortality explored, 275–6
 Muhammad, 58, 59
 Pharaoh, 151, 152
 propaganda in papal conflict with Frederick II, 1,
 42–5
 seasons personified, 69, 75
 Solomon, 43, 44, 69, 205, 206
 spatial enclosure, 49, 55
 Stefano Conti's throne placement and, 69
 "Third Master" of Anagni crypt, 11
 unity with built environment, 54–8, 245
 worldly knowledge as political power, 1, 43
 zodiacal signs and constellations, 75
- Great Introduction to Astrology* (Abu Ma'shar), 270
- Gregory IX
 Anagni and, 6, 45, 252, 283
 conflict with Frederick II, 41, 43, 212
 Conti family, 38
 coronation celebrations, 108
 education, 76, 78
 support for universities, 76
- Gregory the Great
Moralia in Job, 152
- Haman, 225
- Hapi, 168
- Henry of Avranches, 65
- Henry V, 217
- Heptateucon* (Thierry of Chartres), 96–7
- Hereford Mappa Mundi, 49
- Hermagoras, 93
- Herrad of Landesberg, *Hortus deliciarum*, 49, 81, 83
- Hippocrates, 20, 21, 45, 246, 267–8, 273, 274
- Historia Scholastica* (Petrus Comestor), 88, 93,
 111–13, 113
- history. *see also* allegory; virtues and vices
 and allegory in virtues and vices cycle,
 218–31
 blurred with allegory, 204
 good versus evil, chaos versus order, 168–9
 inter pictorial connections, 70
 interpretive uncertainty and historical time,
 165–73
 moral truths, 204
 polemical Christian reading of history, 163–5,
 168
 typology's cognitive paradigm, 201, 205
- Hodder, Ian, 54, 282
- Hoffman, Eva, 27
- Homo signorum*, 269–71, 270
- Honorius III, 40, 124, 210
- Honorius IV, 63
- Honorius of Autun
Imago mundi, 52
- Horace
Satires, 191
- Hortus deliciarum* (Herrard of Landesberg),
 49, 81, 83
- House of Aion mosaic, Antioch on the Orontes,
 154, 157
- Hugenholtz, Grederick, 45
- Hugh of Saint Victor, 79, 83, 98
- humors, four, 275, *see also* elements, four
- Imago mundi* (Honorius of Autun), 52
- imperial court, 41, 47–8, *see also* Frederick II of
 Hohenstaufen
- Innocent III
 Antichrist identifications, 185
 Aristotelian learning, 77
 Conti family, 38, 40
 education of, 78
 on human mortality, 273
On the Misery of the Human Condition, 271
 as Solomon III, 43, 206
 Subiaco fresco, 211, 212
 support for universities, 76
- Innocent IV, 10, 41, 76
- Investiture Controversy, 216–17
- Isidore of Seville
 on Abel, 150, 274
 knowledge and words, 101
 on liberal arts, 93
 primeval matter, 264
De ortu et obitu patrum, 223
Etymologies, 93, 99

- James, Liz, 54
- Janus
 about, 131, 145
 distaff held by, 146–7, 153, 275
 January personified as, 133, 145–8, 147, 153, 275
 multi-stable gaze, 146
- Jean de Meun
 Roman de la Rose, 230
- Jensen, Robin, 164
- Jerome, 192, 194, 204
- Jerusalem, 227
- Job, 151, 152, 168, 188, 213, 222, 223
- John (evangelist), 226
- John Chrysostom, 150, 276
- John of Salisbury
 Metalogicon, 100
- John XXI, 65
- Jordan River, 164, 164
- Judas, 185, 190, 191
- Julian the Apostate, 186, 192, 195, 204–5
- jurisprudence, 206–7, 209–14, *see also* Donation of Constantine; Solomon
- Katzenellenbogen, Adolf, 80, 97
- Kinney, Dale, 166
- knowledge. *see also* allegory; Anagni crypt frescoes; astrology; cosmos and cosmological knowledge; encyclopedias; history; liberal arts; medicine; time and temporal knowledge; word–image relations
 allegory potential impediment to, 230
 ancient knowledge, 13, 14, 75, 245
 Arabic texts, 40, 47, 77, 89–90, 278
 contingency and future contingents, 277, 279
 extra-theological knowledge, 278
 future knowledge, 276–9
 gendered knowledge, 95–8, 102–3
 Greek texts, 77
 human knowledge always incomplete, 277
 human versus divine, 57, 277, 279, 292–3
 language as impediment to, 165–7, 230
 memory pictures and geometric organization, 35
 moral knowledge, 13, 16
 natural philosophy, 47, 77, 90
 partial and complete, relationship between, 57
 temporal–spatial position and, 281, 292
 theological knowledge, 13, 16, 300
 time and, 74
 transmission of, 74, 95, 100
 visualization's role in, 49, 81, 281
 worldly and sacred knowledge coexisting, 7, 97, 299, 303
 worldly knowledge, 1, 5–7, 43, 46, 95, 272–3
- L'Intelligenza*, 53
- labors of the months, 131
 agricultural scenes, overview, 32–3, 130, 133–6
 Aion, 154, 156, 157–8
- ancient motifs in, 144–5, 153–65, 167, 182
- April, 134, 138
- August, 135, 139
- Cain and Abel, connected to, 276
- calendar and cosmos united, 131, 231
- calendar imagery and, 31, 143–5
- cyclicity of year emphasized, 136
- December, 135, 140
- descriptive overview, 130, 133–6
- eternity personified, 157–8
- expression of Christian supremacy, 161–5, 167–70
- February, 133, 136, 147, 276
- Genesis creation story and, 146–53, 231
- human labor and power structures in, 136, 140, 140
- January personified as Janus, 133, 136, 145–7, 147, 153, 275
- July, 135, 139
- June, 135, 139
- kraters, 158
- liberal arts cycle and, 71–5, 85
- March, 134, 137, 144, 147, 276
- May, 134, 139
- Mithras, 16, 158, 158, 162–3, 168–9
- months personified, 144
- mortality explored in, 131, 231, 275–6
- multi-stable gaze, 146
- narrative in, 143–6
- noble gaze, 133–41
- non-labeling of ancient motifs and temporality, 165–73, 231
- October, 135
- pagan cults rendered impotent, 161–5, 167–70
- Palazzo Senatorio, 32
- polemical Christian reading of history, 168
- postlapsarian labor and mortality, 153, 179
- river gods, 160, 160, 163, 168
- San Saba basilica, 31
- Santa Maria de Aventino, 33
- Santi Quattro Coronati, 14, 31
- seasons personified, 131, 132, 133, 134
- September, 135, 154, 155
- spinario* (thorn) iconography, 144, 144, 147, 276
- sun and moon personified, 158, 159, 160, 163, 168–9
- time conceptualized as anthropocentric, 134, 146, 231, 276
- time in, 130, 146, 174–5
- tondo portrait reference, 154
- viewers participating in creation of time, 146
- winter as transitional season, 134
- yearly cycle and human life cycle linked, 131, 231
- Ladis, Andrew, 229
- Lambert of Saint-Omer
 Liber Floridus, 49, 50
- lamp motif, 275
- Laon Cathedral, 83, 84, 85, 99, 100

- Lateran Palace, Rome, 197, 199, 216–17, 216
 Leff, Gordon, 117
 Leonardo Fibonacci, 27, 65
 Levi, Doro, 154
 Leviathan, 43, 169, 213–14, 214
Liber additamentorum (Matthew Paris), 166, 167
Liber astrologiae (Georgius Fendulus), 29, 30
Liber astronomiae (Guido Bonatti), 269, 270
Liber floridus (Lambert of Saint-Omer), 49, 50
 liberal arts, 14
 about, 3, 70
 acoustic horns and Music scene, 104
 Admont diagram, 90–3, 91
 Aldersbach manuscript, 91–3, 92
 ambiguity in frescoes, 59, 87, 90–1
 ancient knowledge and, 13, 14
 Aristotelian learning's impact on, 77
 Arithmetic, 72, 73, 80, 80, 91, 98, 104
 Arithmetic, ancient scholars paired with, 88, 90, 92, 95, 103
 Astronomy, 74, 74, 80, 80, 91, 95, 113
 Astronomy, ancient scholars paired with, 91, 95, 113
 Augustine on, 79
 Cassiodorus, 79, 93
 Chartres Cathedral cycle, 96
 cosmology and temporality integrated with, 74
 Dialectic, 79, 81, 90, 91
 Dialectic, ancient scholars paired with, 86, 90, 95
 dialectic, conception of, 98–9
 educational progression through, 95
 foundational to knowledge, 98–102
 gendered knowledge, 95–7, 102–3
 Geometry, 71, 71, 79–80, 80, 87–91, 88, 91, 95, 103
 Geometry, ancient scholars paired with, 86–7, 87–91, 88, 91–3, 95, 103
 Grammar, 71, 79, 81, 87, 90, 90–1, 93, 95, 98–102
 Grammar, ancient scholars paired with, 90, 90, 93, 98–102
 Isidore of Seville on, 93
 knowledge and, 87, 95, 100
 labors of the months and, 71–5, 85
 Logic, 71, 98
 in medieval tradition, 79–87, 90–5
 Music, 72, 73, 80, 80, 85, 89–90, 91, 95, 104–16, 112–13
 Music, ancient scholars paired with, 90, 109, 111, 112, 115
 musica practica and *musica theorica*, 108–16
 natural philosophy versus, 90
 Noah's sons preserving, 93
 origins of, 92–5
 overview, 69–75
 papal power asserted, 78, 97
 as pathway to God and philosophy, 97
 personifications of, generally, 79–81, 85–7
 philosophers' identities concealed, 87–9
 Philosophy, 81, 85, 99
 Philosophy, ancient scholars paired with, 95
 pictorial tradition, 79–87, 82, 84, 86, 90–3
 platform for intellectual discussion, 89–91
 purpose of, 89–90, 95, 97
 quadrivium, 81, 108, 121
 Rhetoric, 85, 87, 90–1, 91–2, 93–4, 94
 Rhetoric, ancient scholars paired with, 90–1, 90, 92, 93, 94
 rhetoric, conception of, 98–9
 rosette emblem, 82, 83, 85
 theology versus, 90
 trivium, 81, 98–9, 121
 Tubal preserving for future generations, 111
 as unified system of knowledge, 82–5
 worldly and sacred knowledge coexisting, 97
Livre du tresor (Brunetto Latini), 85, 86

 Maddalo, Silvia, 34
 Mâle, Émile, 51
 Marcus Aurelius, 171, 171, 187
 Martianus Capella, 74
 De nuptiis Philologiae et Mercurii, 79
 Master Gregorius
 Narracio de mirabilibus urbis Romae, 163, 170–2
 material universe and materiality
 astrology and, 245–52, 259, 279–81
 four elements and, 246
 humans linked to, 20
 interconnectedness of, 20
 matter's ability to change, 267
 medicine and, 245–52, 259
 mind versus matter, 279–81
 primeval matter, 264
 temporality and, 245–52, 259
 Matthew Paris
 Liber additamentorum, 166, 167
 medicine. *see also* astrology; elements, four; Galen;
 Hippocrates; mortality
 Anagni crypt frescoes, 245–52, 246, 257, 259, 303
 ancient knowledge and, 245
 astrological dimension of, 259
 astro-medicine, 267–73, 277, 303
 cosmos and, 257
 four elements and, 260
 limb assignment theory (*melothesia*), 268–9
 materiality and, 245–52, 259
 matter's ability to change, 267
 microcosm, 259–60
 papal cultivation of, 45, 247, 251–2, 272
 physician as artist, 267
 prolonging life and rejuvenation, 272–3
 time and temporality, 245–52, 259, 269
 Mediterranean courtly network, 28–30
Metalogicon (John of Salisbury), 100
 Michael Scot, 47, 65
 microcosm, 21, 249, 274
 creation theory and, 257, 263
 four elements and, 249
 human creation, 266–7

- human materiality, 279
 materiality and, 20
 medicine and astrology, 257, 259–60
 microcosmic–macrocosmic symmetry, 6, 260
 nature of change, 267
 papal cultivation of worldly knowledge, 45
 zodiac and, 269, 270
- Mirabilia urbis Romae*, 163, 170
- Mithras, 16, 158, 158, 162–3, 162, 168–9, *see also*
 pagan cults
- monochords, 111
- moral knowledge, 13, 16
- Moralia in Job* (Gregory the Great), 152
- Mordechai, 226
- mortality, *see also* medicine; time and temporal
 knowledge
 Anagni crypt frescoes, explored in, 273–4
 calendar imagery, 275–6
 cognition and, 276
 consciousness of time, 148–53
 distaff motif, 146–53, 275
 Innocent III on, 273
 labors of the months, 131, 231, 275–6
 lamp motif, 275
 life stages and aging, 35, 37, 74, 271–3
 papal life spans, 46, 248, 251, 271–3
 political power's transience and, 271–2
 postlapsarian labor and, 153, 179
 Santi Quattro Coronati frescoes, explored in, 275–6
 time transforms the body, 273
Vita Humana frescoes, 35, 141
 Wheel of the Ages, 34–7, 35
 worldly knowledge and, 272–3
- Moses, 222, 223, 224, 226
- Muhammad, 58, 59, 185, 189, 213
- Müller, Kathrin, 8
- music, 104–11
- Narracio de mirabilibus urbis Romae* (Master
 Gregorius), 163, 170–2
- natural philosophy, 47, 77, 90
- Nero, 185, 191, 193, 204, 211, 213
- Nicola Pisano, 83, 84, 100, 101, 119, 299–300
- Nicomachus, 88, 91, 91, 93, 95, 103, 110, 111
- Nile River, 160, 168
- Norman reception room, Palermo, 27, 28
- Ohly, Friedrich, 201
- Old Testament, relationship to New, 201, 218
- On Brevity* (Peter Damian), 271
- On Christian Doctrine* (Augustine), 79, 301
- On Delaying the Symptoms of Old Age* (*De retardatione
 accidentium senectutis*) (Dominus Castri Goet), 272
- On the Misery of the Human Condition* (Innocent III),
 271
- On the Seven Liberal Arts Depicted in a Certain Picture*
 (Theodulf of Orléans), 81, 85, 99
- Opitz, Christian Nikolaus, 7
- optics, 242, 272–3
- Ottaviano degli Ubaldini, 40
- Otto III, 222
- pagan cults, 161–5, 167–70, *see also* Mithras; river
 gods
- palace painting, thirteenth-century. *see also*
 individual buildings and edifices
 allegorical animals, 26–8
 calendar imagery, 30–4
 extant frescoes and mosaics, overview, 25–6
 Mediterranean courtly network, 28–30
 monumental painting as political propaganda, 45
 papal court's rivalry with Hohenstaufen court, 25
 Santi Quattro Coronati in context, 2–7, 26, 36,
 293–303
- Palazzo Senatorio, Rome, 32, 62, 142, 142
- Pan, 145, 145
- Panofsky, Erwin, 153, 180, 182
- papacy. *see also* Anagni crypt frescoes; mortality;
 palace painting, thirteenth-century; Santi
 Quattro Coronati frescoes; *individual popes*
 astrological knowledge cultivated, 45, 247, 251,
 272, 278
 bureaucratic growth, 76
 cultural flowering at papal court, 6, 40–1, 43, 272
 education and papal court, 43, 75–6, 118
 intellectualization of court, 6, 46–8, 77, 247
 jurisprudence and, 97, 206, 211
 legal reforms, 210
 medical knowledge cultivated, 45, 247, 251–2, 272
 music at court, 104
 natural philosophy supported, 47, 77
 papal power asserted in frescoes, 1, 41–2, 78, 97
 papal self-representation in frescoes, 296
 political propaganda, 45, 197, 218
 shared cultural world with imperial court, 47–8
 time an expression of ecclesiastical authority, 127–30
 time cultivated, 77, 251
 worldly knowledge and, 5–7, 43, 45–8, 272
- papacy–Frederick II conflict. *see also* Sylvester
 Chapel, Santi Quattro Coronati, frescoes
 about, 40–3
 Anagni crypt frescoes commenting on, 7, 45–6
 as apocalyptic struggle, 213
 Donation of Constantine, 78, 214–17, 303
 Frederick as Leviathan and Antichrist, 43, 45, 204,
 212–13, 214
 legal framing of, 214
 palace painting and, 25
 pamphlet wars, 211
 pope as Pharisee and devil, 213
 propaganda, 1, 42–6, 217
 Solomon, claims to, 43
 worldly and sacred knowledge coexisting, 7
- Parabiago plate, 154, 157
- Paravicini Bagliani, Agostino, 41, 46, 271
- Paul, 189, 190, 210

- Paxson, James, 123, 219–20
 Pentcheva, Bissera, 54
 personifications. *see also* labors of the months; liberal arts; virtues and vices
 in Alan of Lille, 230
 allegory's equivocality and, 230
 cosmological personifications, 17
 eternity, 154–8
 female personifications with distinctive attributes, 79
 gender and grammar, 103
 Janus, 133, 145–7, 147, 275
 Jordan River, 164, 164
 moon, 17, 158, 159, 160, 163, 168–9
 seasons, 69, 75, 131, 132, 133, 134
 semantic openness of, 158, 163–5
 sun, 17, 158, 159, 160, 163, 168–9
 Peter, 191, 193, 204, 211
 Peter Damian
 On Brevity, 46, 271
 Petrus Comestor
 Historia scholastica, 88, 93, 111–13, 113
 Pharaoh, 151, 152, 168–9, 189, 213, 226
 Philip of Tripoli
 Secret of Secrets (Secretum secretorum), 47
 philosophy. *see also* Aristotle; Plato
 Aristotle's revisionary potential, 77
 frescoes as tools for, 291–2
 pagan philosophy's usefulness, 301
 as pathway to knowledge of God, 97
 realism versus nominalism, 242
 theology unified with, 300–3
 time in Neoplatonic philosophy, 154
 Piranesi, Giovanni Battista, 32
 Plato, 95, 110, 111, 260–1
 Timaeus, 260, 264, 285
 Plotinus, 156
 Poole, Reginald, 174
 Porphyry, 86, 95
 Pozzo, Cassiano dal, 32
 Priscian, 90, 91, 94, 94
Prognostication of Disease by Astrology (Pseudo-Galen), 268
 prophet–apostle motif, 200–1, 202, 204
 Prudentius
 Psychomachia, 43, 188, 196, 218–19, 221
 Prüfening manuscript, 222–7, 224
 Psalms, 226
 Pseudo-Aristotle
 Secret of Secrets (Secretum secretorum), 272, 277
 Pseudo-Galen, 269
 Prognostication of Disease by Astrology, 268
 Summary on Crises and Critical Days, 268
 Pseudo-Hippocrates
 Astrologia Ypocratis, 268
Psychomachia (Prudentius), 43, 188, 196, 218–19, 221
 Ptolemy, 91, 91, 95, 113
 Pythagoras, 89–90, 91, 93, 109–11, 110, 113, 114, 115
 Quadri, Irene, 29, 32
 Quintilian, 93, 218
 raising on shoulders motif, 200–1, 202, 204
 Raniero Capocci, 26–8, 63, 65
 Red Sea crossing, 152, 169, 179
 Remigius of Auxerre, 79, 93
 Revelation, Book of, 169–70, 226, 266, *see also* Anagni crypt frescoes
 Riccardo Conti, 38, 41
 river gods, 160, 160, 163, 168, 181, *see also* pagan cults
 Roger Bacon, 47, 65, 272–3
Roman de la Rose (Jean de Meun), 230
 Romano, Serena, 7, 26–7, 61, 244
 Rome
 artistic and architectural production, 4–6, 61
 as Christian triumph over paganism, 13, 170
 Mediterranean courtly network, 28–30
 soundscape, 108, 124
 Rowe, Nina, 207
 Royal Palace, Palermo, 27, 28
 Rudolph, Conrad, 51, 261
 Sacro Speco monastery, Subiaco, 211, 212, 236
 Saint Hubert Bible, 285
 Saint Thomas in Neumarkt, Merseburg, 201, 202
 Sala dei Nove, Siena, 4
 Salimbene di Adam, 213
 Samuel, 45, 46, 227
 San Clemente, Dominican monastery, 26–8, 27
 San Marco, Venice, 148, 149, 295
 San Pellegrino, Bominaco, 143–4, 143
 San Saba basilica, Rome, 29, 29, 31, 142, 143
 Sant'Andrea, Ferrara, 300, 302
 Santa Maria de Aventino, Rome, 32–4, 33, 142, 144, 144
 Santa Maria in Pallara, Rome, 201, 204
 Santa Maria at Summaga, Veneto, 196, 197
 Santa Maria Novella, Florence, 4, 293, 293
 Santi Giovanni e Paolo, Rome, 107
 Santi Quattro Coronati, 38
 acoustic elements, 104–5, 106
 administration of justice, site for, 207
 architectural development, 39, 122, 175
 as *Gesamtkunstwerk*, 105
 great hall, 38, 104–5, 207
 human versus divine knowledge dramatized, 58
 sensory engagement of spectators, 54
 Santi Quattro Coronati frescoes. *see also* encyclopedias; great hall frescoes, Santi Quattro Coronati; knowledge; palace painting, thirteenth-century; papacy–Frederick II conflict; spectatorship; Sylvester Chapel, Santi Quattro Coronati
 about, 1, 127
 Anagni crypt, links with, 5–7, 244–5
 animals, 28
 audience, 59

- calendar imagery, 14, 30, 31
 conditions of human existence, 37
 cosmological personifications, 17
 encyclopedism of, 4, 6–7, 13, 49
 as monumental image of world's knowledge, 291–3
 papal self-representation and, 296
 personified rivers, 16
 semantic ambiguity of, 165
 as tool for philosophical thinking, 291–2
 unified system of knowledge, 13
Satires (Horace), 191
 Saul, 45, 46, 223
 Scheyern codex, 103
Secret of Secrets (*Secretum secretorum*) (Pseudo-Aristotle/
 Philip of Tripoli), 47, 65, 272, 277
 Seidel, Max, 119
 semantic and iconographic ambiguity, 165–7, 171–2
 senses, physical, 35, 36
 Serafino de' Serafini
 Triumph of Saint Augustine, 299–303, 302
 shoulder-carrying motif, 200–1, 202, 204
 Sicily, 28–30
 Siena Cathedral crypt, 60
 Simon Magus, 185, 194, 196, 204, 213
 Sinding-Larsen, Staale, 54
 Smith, Michael Q., 8, 21
 Socrates, 95
 Solomon, 43, 44, 69, 97, 189, 205, 206, 207, 208
 Souvigny Bible, 261, 262
 spectatorship
 active viewer participation, 262
 in Anagni crypt, 22, 251, 253–9, 262, 279
 ancient pictorial motifs, reception and
 repurposing, 153, 163–5
 bodily movement and, 7, 292, 296
 embodied viewing, 257–9
 entanglement and entrapment, 282
 frescoes generally, and, 53–4
 interdependency and reflective viewing, 54–60
 interpretive involvement, 223
 interval and participatory looking, 7, 253–9,
 296–9
 knowledge generation and, 6
 labels delimiting speculation, 184, 231
 limits of human knowledge, 292
 non-labeling of images and motifs, 167, 170, 172,
 223, 231
 semantic ambiguity of images and, 166, 171–2
 semantic openness of personifications, 158, 163–5
 virtues and vices as coded diagrams, 194
Speculum astronomiae, 268, 277–8
Speculum maius (Vincent of Beauvais), 52
 Stefano Conti
 about, 1, 38
 commissioning palace, 38
 curial career, 1, 42, 78
 Donation of Constantine and, 42
 education, 78
 knowledge, enthusiasm for, 78
 music appreciation, 104–5
 papal conflict with Frederick II and, 42
 power of written documents, 217
 throne, 69
 Strasbourg Cathedral, 207, 208
Summary on Crises and Critical Days (Pseudo-Galen),
 268
 Summers, David, 54, 68
 Sylvester, 42, 42, 108, 215–16, 215
 Sylvester Chapel, Santi Quattro Coronati, 104, 105,
 127, 128
 Sylvester Chapel, Santi Quattro Coronati, frescoes, 3
 Constantine and Sylvester, 108, 215, 215
 Donation of Constantine and, 42, 215, 215, 303
 liturgical calendar, 128, 129
Officium stratoris, 42, 42, 215
 papal power asserted, 41, 42, 78
 “Second Master” of Anagni crypt, 11
 syzygy diagram, 21, 45, 260–1, 274
 Theodulf of Orléans, 165, 184
*On the Seven Liberal Arts Depicted in a Certain
 Picture*, 81, 85, 99
 theological knowledge, 13, 16, 300
 Thierry of Chartres, 121, 261
Heptateucon, 96–7
 Thomas Aquinas, 77, 181, 277, 292–3, 293
 thorn motif, 144, 144–5, 145, 147, 276
 Thunø, Erik, 10
Timaeus (Plato), 260, 264, 285
 time and temporal knowledge. *see also* calendar
 imagery; labors of the months; mortality
 absolute versus earthly, 155–8
 as anthropocentric, 134, 146, 231, 276
 astronomy and, 245–52
 atemporal perspective versus human experience, 231
 Cain and Abel and, 148–53
 calculation of, 174–5
 calendar imagery and, 30–1, 34
 cosmological knowledge, joined with, 29
 education in relation to human life cycle, 74
 eternity, 154–8, 277
 Eucharist and, 158
 expression of ecclesiastical authority, 127–30
 incompleteness of knowledge and, 277
 interpretive uncertainty and historical time,
 165–73
 liberal arts integrated with, 74
 macrocosmic conception of, 130
 materiality and, 245–52, 259
 medicine and, 245–52, 259, 269
 months and seasons, 13, 14, 29, 31, 75
 narrative conveying, 145–6
 in Neoplatonic philosophy, 154
 non-labeling of ancient motifs, 165–73, 231
 papacy's cultivation of, 77, 251
 temporal-spatial position and knowledge, 281, 292

- time and temporal knowledge. (cont.)
 virtues and vices versus labors of the months, 231
 yearly cycle and human life cycle, 131, 231
- Toesca, Pietro, 19
- trampling motif, 195–200, 199, 222, 234, 300, *see also*
 virtues and vices
- Tre Fontane Cistercian abbey, Rome, 34–8, 35,
 139, 141, 174
- Triumph of Saint Augustine* (Serafino de' Serafini),
 299–303, 302
- Tubal, 89, 109, 111, 112, 125
- typology, 201, 203, 205, 218
- universities, 46, 76–7
- van Heemskerck, Maarten, 160, 161, 171
- Verkerk, Dorothy, 179
- viewers. *see* spectatorship
- Vincent of Beauvais
 Speculum Maius, 52
- virtues and vices, 16
 Abraham, 222, 223
 Ahab, 223, 224
 Alexander the Great, 192, 194, 204
 allegory and history, interdependency of, 223, 226
 allegory versus history, 230–1
 ancient pictorial motifs, unlabeled *spolia*, 167–70, 172
 apocalyptic, eschatological framing, 213, 218
 Appetite for Honor (*Honoris Appetentia*), 224, 225
 Arena Chapel frescoes, 228, 228
 Arius of Alexandria, 190, 190
 Augustine, 191, 192
 Avarice (*Avaritia*), 190, 191
 in Bamberg Apocalypse, 220–3, 222
 Caiaphas, 228, 228
 Charity (*Caritas*), 226
 Charity (*Karitas*), 191, 193, 210
 Chastity (*Pudicitia*), 222, 223
 Christ in the *Last Judgment*, 229
 as coded diagrams, 194
 Concord (*Concordia*), 189, 190
 Croesus, 227
 Daniel, 59, 189
 Daughter of Babylon, 226
 Daughter of Sion, 226
 David, 189, 189, 222, 223, 224, 226–7
 descriptive overview, 188–94
 Desire (*Voluptas*), 223, 224
 Despair, 197
 Discord (*Discordia*), 190, 190
 documentary rhetoric, 210–11, 217
 Dominic de Guzmán, 192, 196, 204–5
 Elijah, 223, 224
 eschatological image of history, 168–70
 exegetical understanding of history, 231
 Exodus narrative, 168–9
 Faith (*Fides*), 188
 Fear of God (*Timor Domini*), 192, 194, 222, 223
 Fortitude (*Fortitudo*), 226, 229
 Fortune (*Fortuna*), 227
 Francis of Assisi, 192, 195, 204–5
 good versus evil, chaos versus order, 168–9
 Greed (*Cupiditas*), 226
 Hatred (*Odiūm*), 191, 193, 211
 Heavenly Love (*Amor Celestis*), 192, 195, 204
 Heresy (*Heresis*), 219–20, 221
 historical and allegorical figures presented, 219
 historical knowledge and, 132, 163, 168–9, 194,
 204–5
 history versus allegory blurred, 204
 Holy Emulation (*Emulatio Sancta*), 192, 196
 Humility (*Humilitas*), 189, 189, 223, 224, 227
 Hypocrisy (*Ypocrisis*), 191, 192
 Idolatry (*Idolatria*), 183, 188
 interpictorial connections, 70, 151
 Job, 168, 188, 213, 222, 223
 John (evangelist), 226
 Judas, 190, 191
 Julian the Apostate, 192, 195, 204–5
 Justice (*Iustitia*), 207, 210, 226, 229
 knowledge presented through, 13
 labels and interpretive keys, 184, 230–1
 levels of signification, 219
 Long-Suffering Patience (*Longanimitas*), 224, 226
 Love of the Present Era (*Amor Presentis*
 Saeculi), 204
 Lust (*Libido*), 222, 223
 Luxury, 59
 Luxury (*Luxuria*), 189
 Magnanimity (*Largitas*), 190, 191
 Mary in *The Way to Cavalry*, 229
 metalepsis in, 220, 227
 moral knowledge, 13, 16
 Mordechai, 224, 226
 Moses, 222, 223, 224, 226
 Muhammad, 59, 189
 Nero, 191, 193, 204, 211
 Obstinacy (*Obstinantia*), 222, 223
 Opulence (*Opulentia*), 227
 as papal propaganda, 218
 Patience (*Patientia*), 152, 168, 188, 213, 222, 223
 Patience/Meekness (*Mansuetudo*), 224, 226
 Penitence (*Poenitentia*), 222, 223
 Perverted Emulation (*Emulatio Perversa*), 194, 196
 Pharaoh, 152, 168–9, 189, 213, 224, 226
 Pharisee, 191, 192
 Pride (*Superbia*), 189, 189
 Prudence (*Prudentia*), 226
 Prüfening manuscript, 222–7
 psychomachian theme, 203, 205
 reflective viewing, 58
 Saint Jerome, 192, 194, 204
 Saint Lawrence, 190, 191
 Saint Paul, 189, 190, 210
 Saint Peter, 191, 193, 204, 211
 Saul, 223, 224

- scriptural narratives and exegetical commentaries
 - evoked, 168–70
- shoulder-carrying motif, 200–1
- Simon Magus, 194, 196, 204
- Sobriety (*Sobrietas*), 59, 189, 223, 224
- Solomon, 43, 189, 207
- sources and references for, 197–200
- strict allegorical personifications, 219
- Temperence (*Temperentia*), 226
- temporal distance and contrast, 204
- trampling representing triumph, 196, 222, 300
- True Religion (*Vera Religio*), 191, 192
- typology structuring history, 203, 205
- Vainglory (*Inanis Gloria*), 192, 194, 222, 223, 224
- vices alluding to Frederick II, 43
- Violence (*Potentia*), 224, 226
- Wrath (*Ira*), 152, 168, 189, 213, 222, 223, 228, 229
- Vita Humana frescoes, 34–8, 35, 141
- Vitruvius, 67
- von Schlosser, Julius, 52
- Walters cosmography, 279, 280
- water and the seas, 168–9
- Williams, Steven, 47
- word–image relations
 - de-naming, 166–7
 - documentary mode of representation, 210–11
 - documentary rhetoric, 217
 - documents in virtues and vices cycle, 210–11
 - inscriptions, 165–6, 188
 - knowledge preservation and dissemination, 100
 - non-labeling, 167–70
 - propagandistic potential, 217–18
 - words as visual knowledge repositories, 101
- zodiac and constellations, 75, 248
 - astro-medicine, 257, 268
 - clockwise versus counterclockwise arrangement, 279
 - interpictorial connections, 248, 257, 269
 - microcosm, 269, 270
 - viewpoint perspective, 279
 - Walters Cosmography, 279, 280
- Zoroaster, 86

